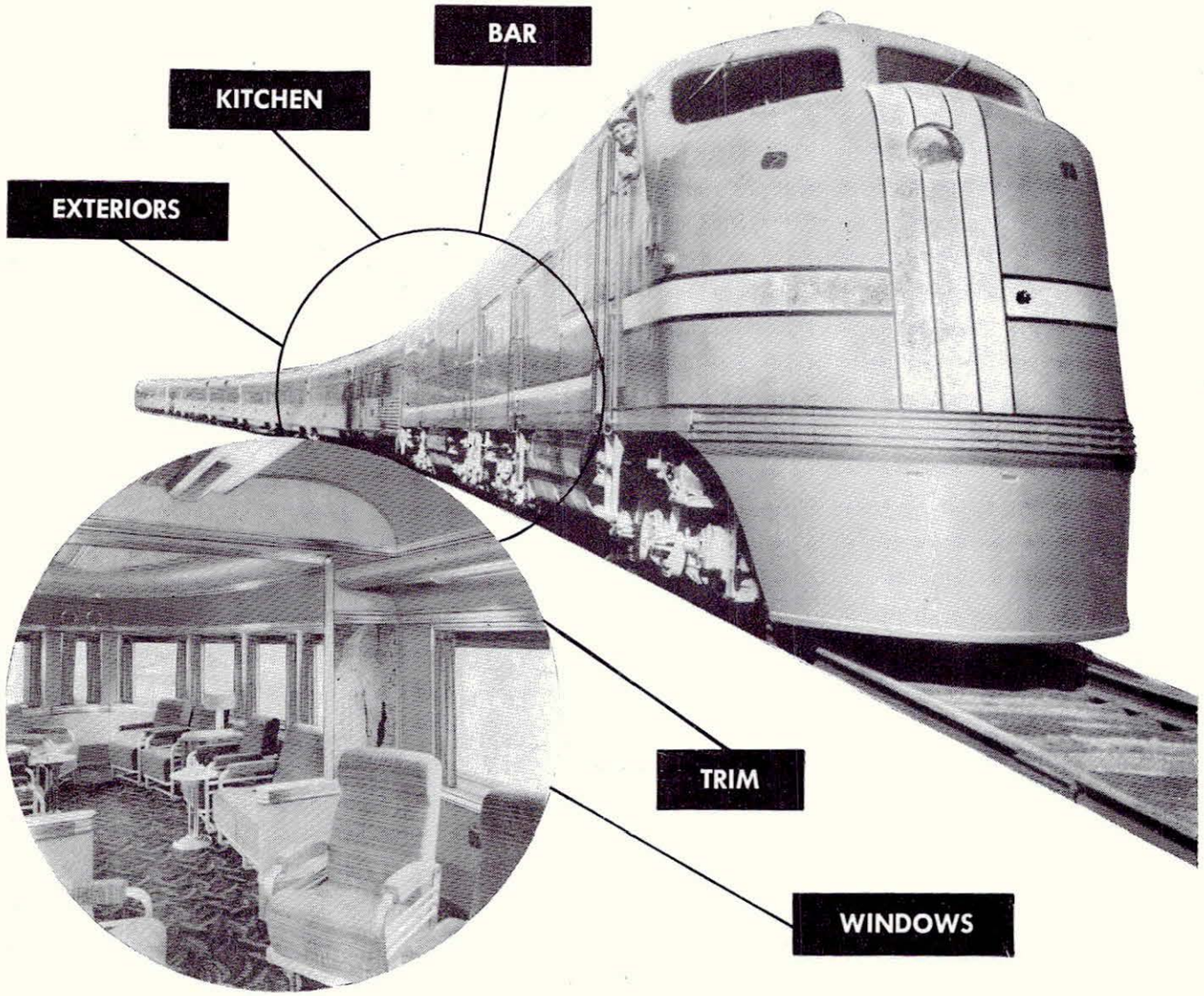


Where Stainless Steel is a Sound Choice

Many parts of a modern streamliner can be made stronger, more attractive, and more durable with ARMCO Stainless Steels.

Exteriors, window frames and trim, kitchen and bar equipment—all gain by the use of this bright metal.

Here are just a few . . .

All stainless steels have notable resistance to corrosion. The clean-looking appearance of this modern steel appeals to passengers.

And you'll find the rich, rustless surface of ARMCO Stainless easy to keep clean. Soap and water—or common kitchen cleansers—will keep the surface bright and shining. Corrosive atmospheric conditions have no effect on its finish.

High Tensile ARMCO Stainless Steels assure a high strength/weight ratio for exterior panels and structural parts. They save weight without sacrificing strength.

When you plan new trains or car parts of stainless steel, remember there is an Armco grade and finish for every railroad requirement. The American Rolling Mill Company, 4241 Curtis Street, Middletown, O.

Export: Armco International Corporation

more scrap
means more steel

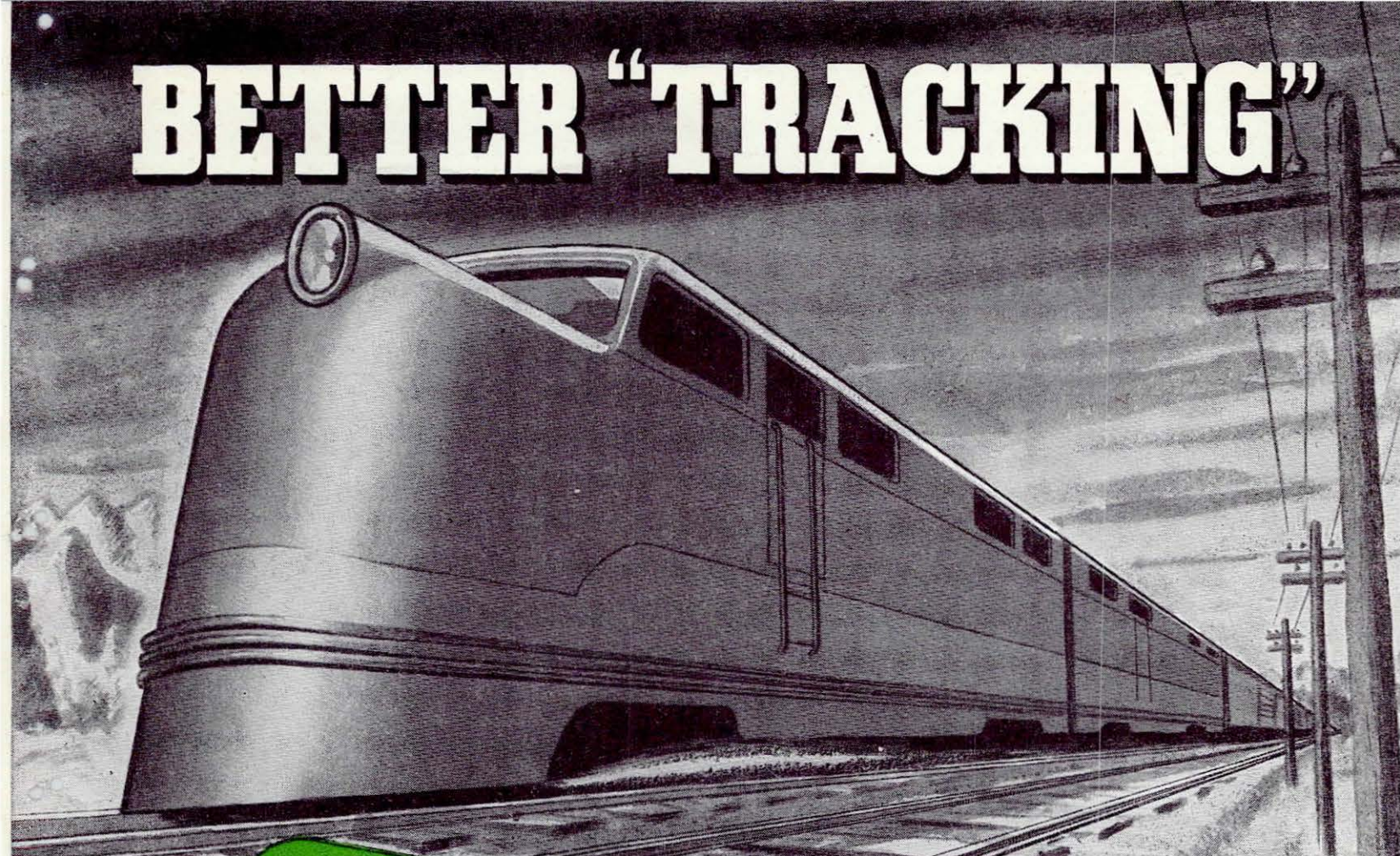
We urge you to collect every pound of iron and steel scrap, including unused and obsolete equipment. Speed it to the steel industry through your regular channels. Present high production cannot be maintained unless more scrap is shipped to the mills now. The situation is critical.

STAINLESS ARMCO STEEL

THE AMERICAN ROLLING MILL COMPANY

Special-Purpose Sheet Steels • Stainless Steel Sheets • Bars • Wire

BETTER "TRACKING"



This Smooth-Running Truck Cuts Lading Damage Claims

A first-time ride over Ride-Control Trucks is an *eye-opener*, particularly when cars provide a view of the trucks in action. "Better tracking" can scarcely describe the *smoother* operation.

The same uniform friction which controls *up-and-down* motion of soft, long-travel truck springs also gives the Ride-Control Truck *ideal* tracking characteristics.

Axles float freely. Yet lateral bolster movement is cushioned by *constant* friction between bolster and side frames, and resisted by the truck springs which return the bolster to normal position as side pressure is relieved. *Balanced* pressures at the ends of the bolster resist misaligning forces —act to "square" the truck on straightaways.

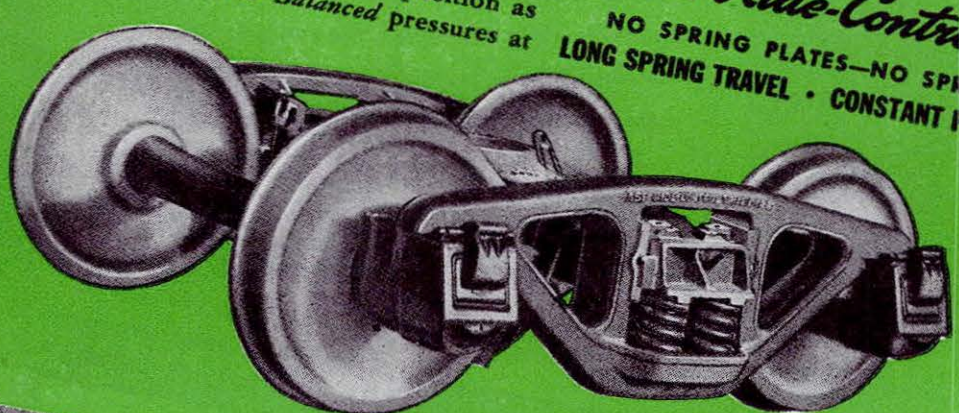
This better, smoother freight car truck protects lading from *all types* of rail shocks—at all loads, *all speeds.*

Over 27,000 sets of this modern freight car truck are already in service or on order for 53 railroads and private car owners.

A·S·F *Ride-Control* TRUCK

NO SPRING PLATES—NO SPRING PLANKS

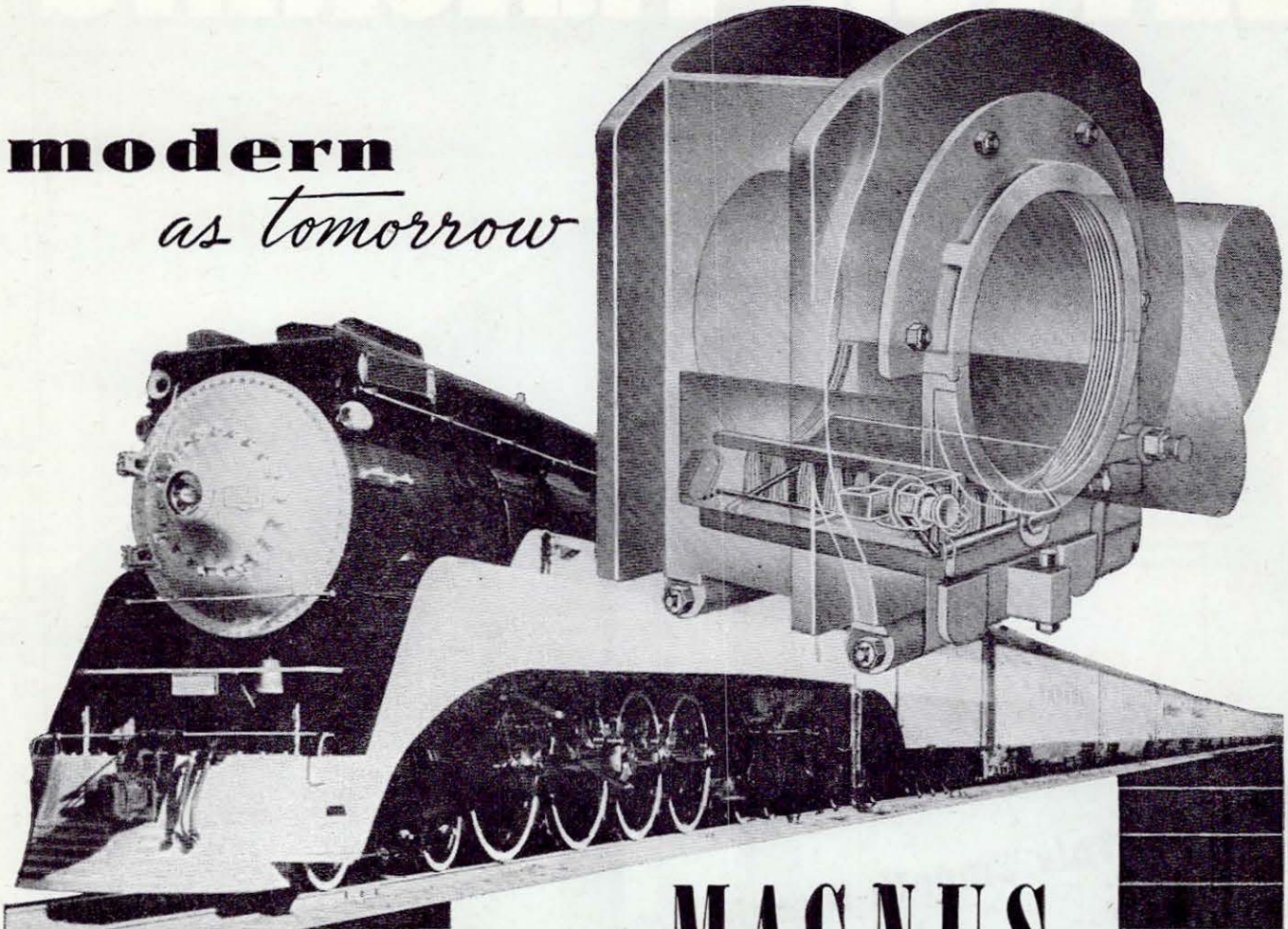
LONG SPRING TRAVEL • CONSTANT FRICTION CONTROL



AMERICAN STEEL FOUNDRIES

MINT-MARK OF ⬡ FINE CAST STEEL

modern
as tomorrow



MAGNUS

Locomotive Journal Oil Lubricator

Here is positive lubrication for locomotive bearings. The Magnus Lubricator uses a light-viscosity oil, which increases the life of journal and lateral-face bearings three to five times. Bearings run cooler, road mileage between classified repairs is doubled, and turn-around time is reduced because of quicker servicing.

SATCO Bearing Metal

MODERN HEAVY DUTY BEARINGS

MAGNUS METAL CORPORATION
CHICAGO NEW YORK

1900

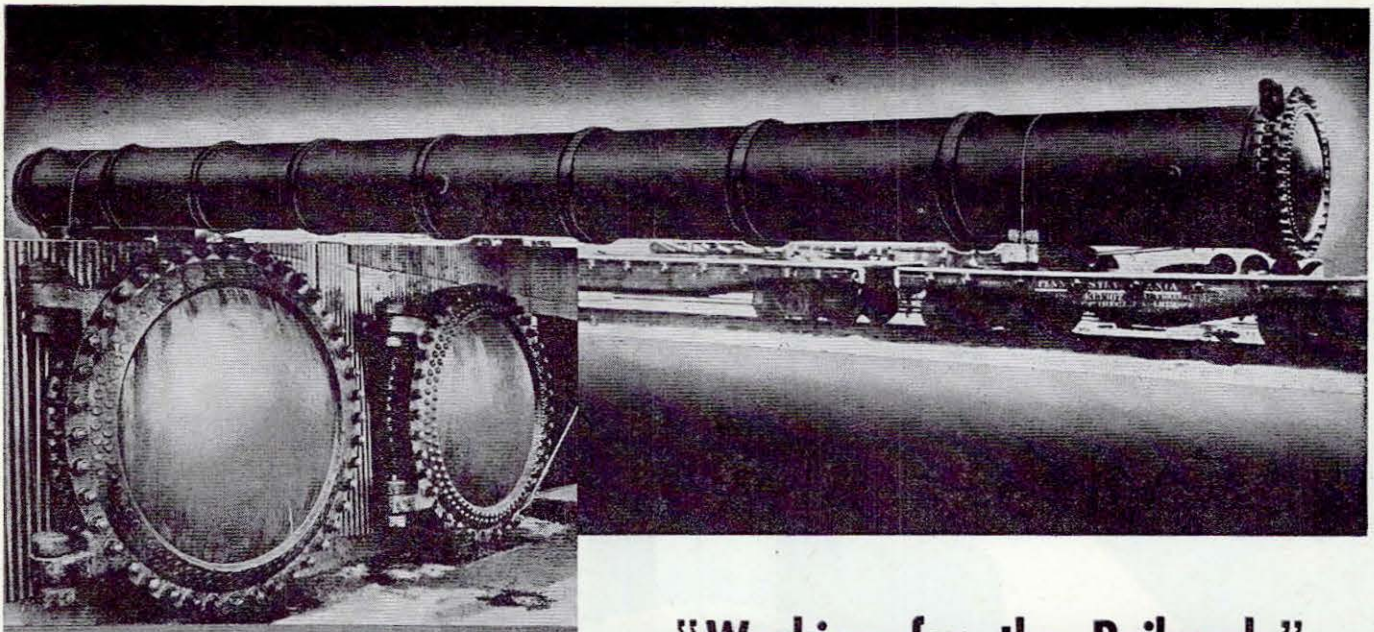
SAVES TIME AND MONEY!

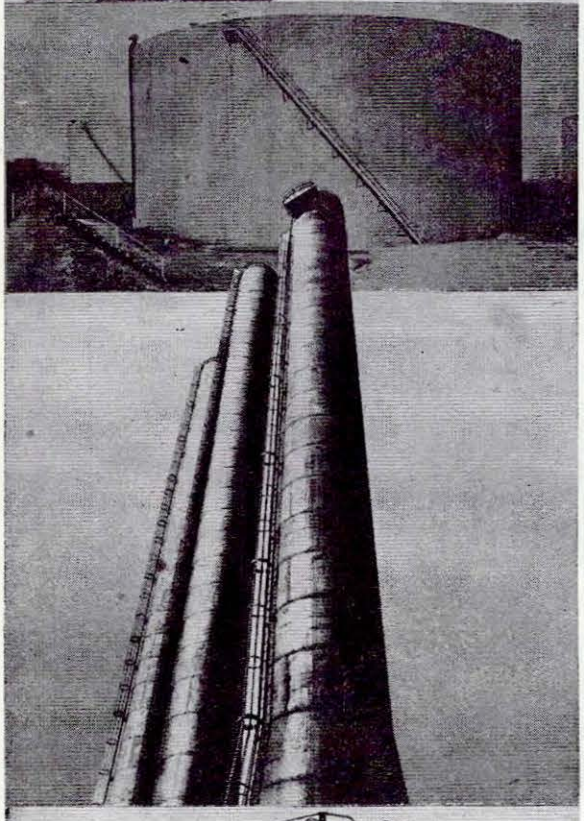
On many of America's major railroads, Bendix V.H.F. Radio is proving that the routine use of instantaneous two-way voice communications means faster freight service and more productive time for motive power equipment—real savings in time and money.

BENDIX RADIO
REG. U. S. PAT. OFF.

BENDIX RADIO DIVISION
Bendix Aviation Corporation
Baltimore 4 • Maryland

PRODUCT OF Bendix AVIATION CORPORATION





"Working for the Railroads"

CREOSOTING cylinders, storage tanks – water, oil, creosote – self-supporting steel stacks, bins and the familiar GATX tank cars are among the numerous items built by General American for the railways of America and foreign countries.

Complete equipment for controlled heat treating and stress relieving of the most modern and approved design permits the welding of all weldable steels. Some of this railroad equipment has been built to customers' specifications, some designed by us as well as fabricated and erected.

One of our engineers will be glad to submit recommendations and quotation on your requirements for plate fabricated equipment.

General American

TRANSPORTATION CORPORATION

process equipment • steel and alloy plate fabrication

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OFFICES: Chicago, Louisville, Cleveland, Sharon, Orlando, St. Louis, Salt Lake City, Pittsburgh, Washington, D. C.

CONSIDER THIS PROPOSAL TO STRETCH YOUR STEEL

It Provides for a More Efficient Use of Sheet Steel—More Finished Products per Ton

We are assuming that your most pressing problem today, like that of most manufacturers, is how to increase production with a limited amount of sheet steel. And we believe we can help you solve that problem, in part or in whole, through the application of N-A-X HIGH-TENSILE to your operations.

High Physical Properties Take the Place of Mass

The method we suggest to stretch your steel is simple: Let metallurgy take the place of mass. The improved physical properties of N-A-X HIGH-TENSILE, as compared with carbon sheet steels, make it possible to reduce sections substantially without sacrifice of strength. By taking full design advantage of N-A-X HIGH-TENSILE's strength, impact toughness, fatigue- and corrosion-resistance, manufacturers have cut weight and mass as much as 25% in scores of parts and products.

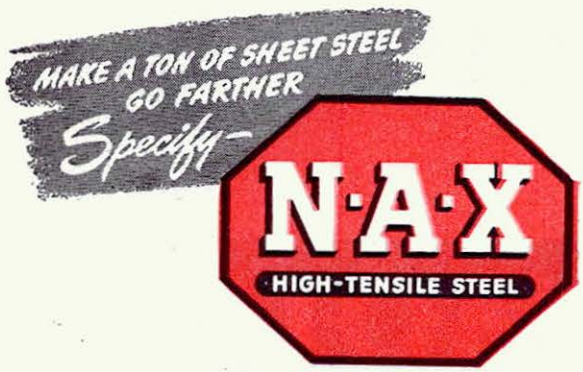
3 Tons of N-A-X HIGH-TENSILE Do 4 Tons of Work

A saving of 25% in sectional mass means that 3 tons of N-A-X HIGH-TENSILE will replace four tons of carbon sheet steel. Four products can be built for every three formerly produced—a 33% production increase. This is entirely feasible in a wide range of applications, for N-A-X HIGH-TENSILE can be cold-formed and drawn to intricate shapes, has excellent weldability, and retains its properties under extremely high temperatures.

Production Economies Make Up for Higher Material Costs

We believe that N-A-X HIGH-TENSILE will compare favorably in price with cheaper steels *on a basis of over-all costs*. The most important economy, of course, is the fact that three tons take the place of four. But in addition, the properties and characteristics of N-A-X HIGH-TENSILE steel often effect substantial savings in handling, fabricating and finishing operations to compensate further for its higher cost per ton.

We would like a chance to work with you on the application of N-A-X HIGH-TENSILE to your production. We believe we can demonstrate that it is the logical steel to use—an effective answer to your current problems.



GREAT LAKES STEEL
Corporation
N-A-X ALLOY DIVISION • DETROIT 18, MICHIGAN
UNIT OF NATIONAL STEEL CORPORATION

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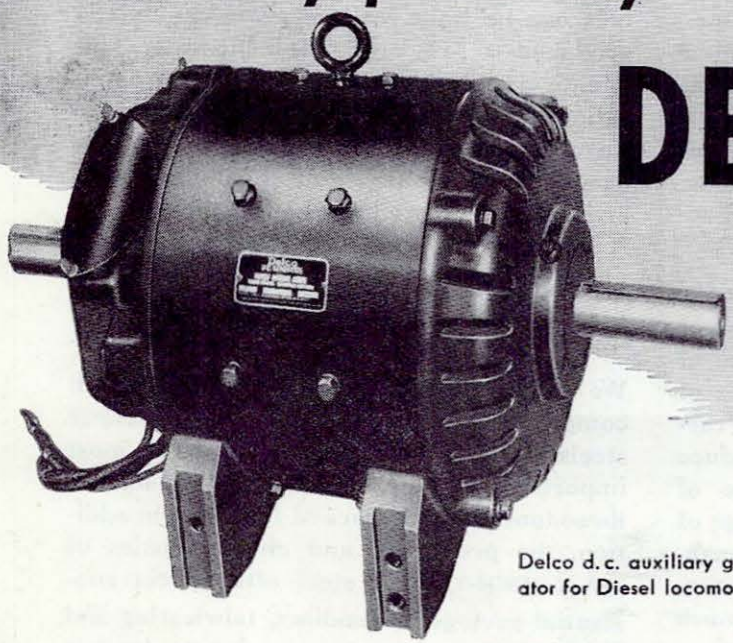
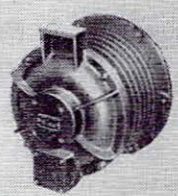
Traction power by Diesel—

auxiliary power by DELCO

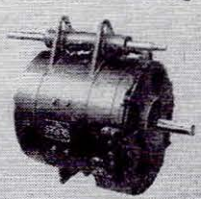


Delco d.c. auxiliary generator for Diesel locomotives.



Delco 5-h.p. blower motor for cooling traction motors

Delco 12-h.p. blower motor, vertical mounting, to cool grids in electric braking.



Delco compressor motor for car air-conditioning.

On Diesel-electric locomotives, this Delco auxiliary generator furnishes exciting current for the large d.c. generators which provide power for the traction motors. It also charges batteries and carries the lighting system.

Like all Delco motors and generators for railroad use, this Delco generator is rugged and compact. Delco railroad equipment is designed for hard usage.

DELCO MOTORS

DIVISION OF GENERAL DELCO PRODUCTS DAYTON, OHIO MOTORS CORPORATION

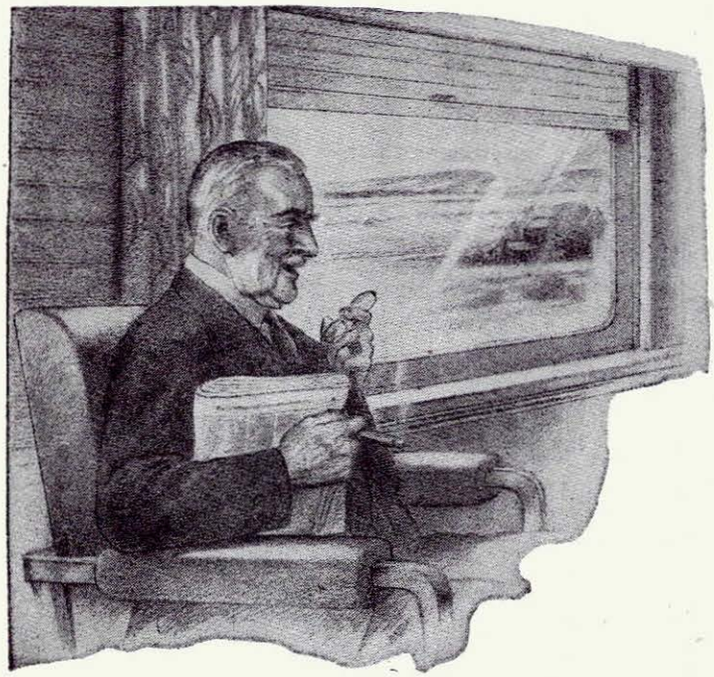
Magor

Designers and Manufacturers of Freight Cars of All Types Including Air Dump Cars

MAGOR CAR CORPORATION

50 Church Street

New York 7, N. Y.



Your Shipments Really Roll Nowadays,

says

R. R. Rider

(Number twelve of a series)

It's news to most folks that freight service is a lot faster and better than it used to be. The reason it's news is because the closest most people get to a freight train is once in a while when they watch one pass. Back in the 'twenties that sometimes took quite awhile, with trains crawling along at 15-20 miles an hour, and that's what most people still remember. Well, freight *was* slow then. Why, I recall how railroads used to boast that they could make deliveries 300 miles away by the second morning. Now you see freights zipping along like passenger trains—50, 60 miles an hour. It's nothing anymore to ship an order this afternoon and have your customer 400 miles away get it next morning. And not only hot shot freights travel that way. They tell me the average speed of all freights is 52 per cent higher than it was twenty years ago.

They didn't bring the change about just by deciding to go faster. A lot of things had to be changed; especially locomotives. A fellow told me the other day (he was a locomotive designer) that there used to be two distinct breeds of engines. Almost anyone could tell them apart; they were like Clydesdales and Thoroughbreds. Freight engines were long on pull but short on speed. Passenger engines, on the other hand, were light and fast but "couldn't pull taffy," as this fellow put it. So gradually they got the kind of engines that were efficient at either job. Maybe there's a dual purpose engine up ahead now. If so, the chances are that tonight it will be headed back the other way with a string of freight cars. You don't have to know a thing about railroad to see the advantages of engines like that. I understand that in 1944, with 30 per cent less locomotives, they hauled something like 45 per cent more ton-miles than in 1918. That kind of efficiency pays off in any business, but the ones who really collect are the shippers and consumers.

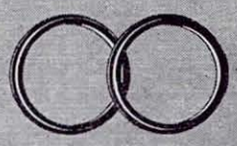
Yes, we fellows who only ride the cushions see only a small part of the improvements in railroading.

Edgewater

Serving America's Railroads

RING SPRING DRAFT GEARS

ROLLED STEEL WHEELS

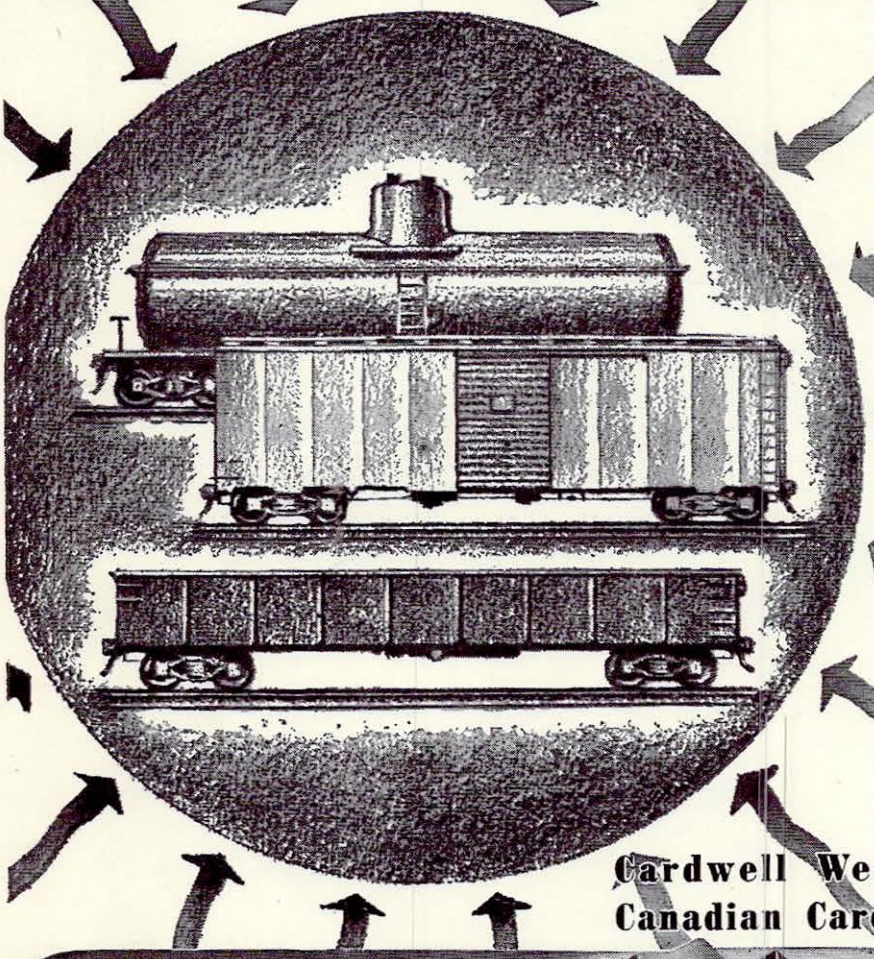


LOCOMOTIVE TIRES

EDGEWATER STEEL COMPANY · PITTSBURGH, PA.

Atlanta — Baltimore — Boston — Chicago — Cleveland — Kansas City — Louisville — New York
Philadelphia — St. Louis — St. Paul — San Francisco — Seattle — Washington, D. C.

All-round Protection



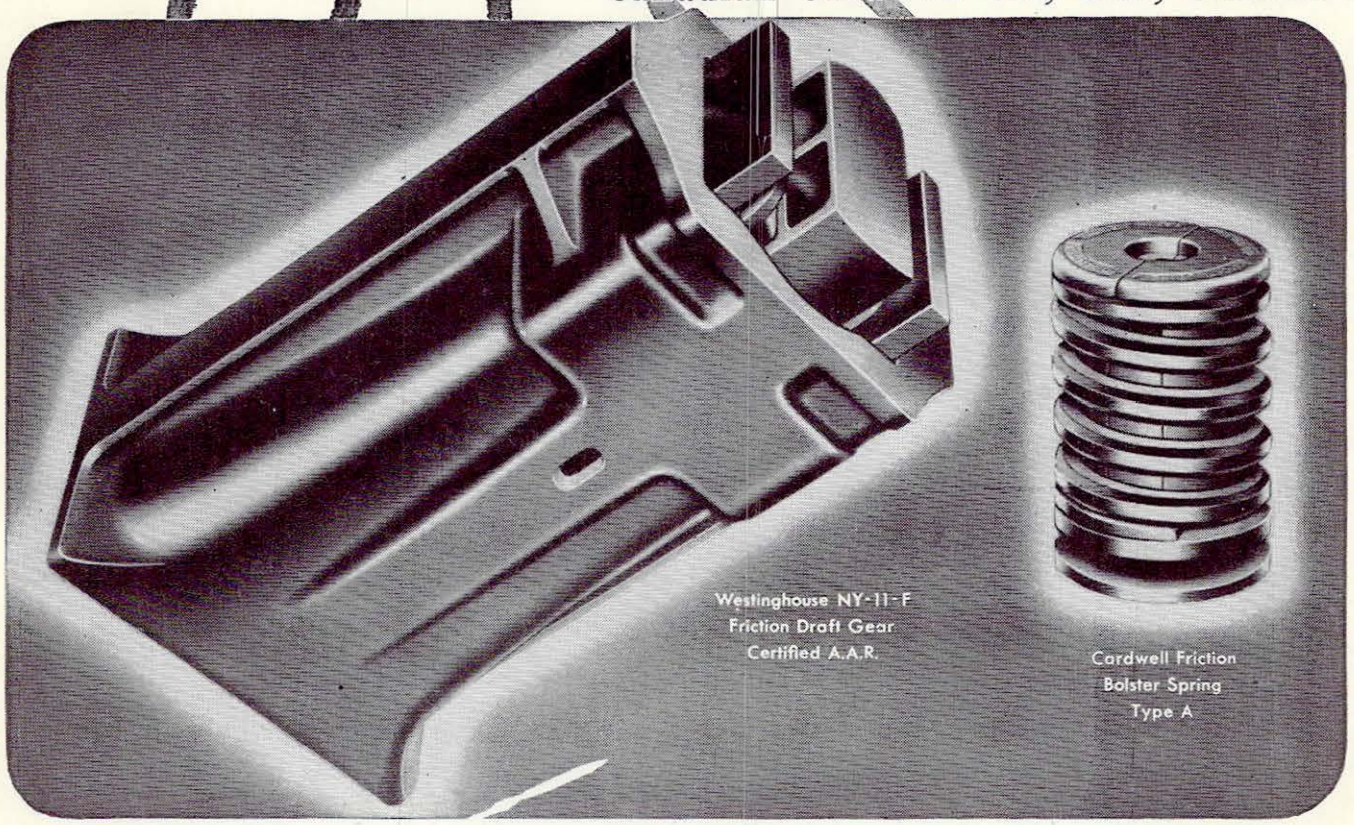
Cardwell and Westinghouse Friction Draft Gears and Bolster Springs protect Cars and Ladings:

— By absorbing the shocks to which couplers, cars and lading are otherwise subjected in coupling, starting, operating and stopping trains or cars.

— By absorbing the bumps and bouncing caused by rail joints, and the shocks and stresses due to curves and other roadbed conditions which build up sidesway and rocking.

Over 98% of the cars in freight carrying service are A. A. R. construction, and over 96% have Friction Draft Gears.

Cardwell Westinghouse Co., Chicago
Canadian Cardwell Co., Ltd., Montreal

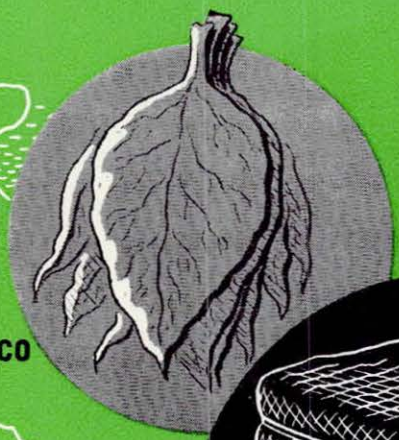


1573R

bananas

cocoa

and now.

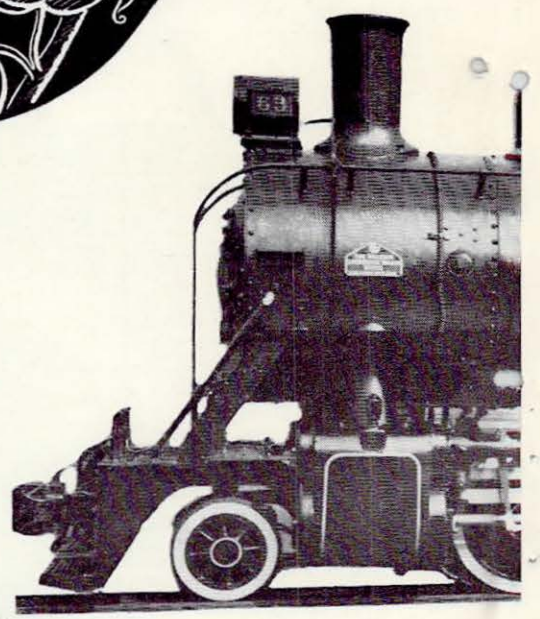


tobacco

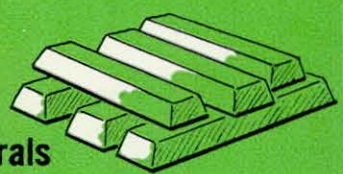
cotton

COLOMBIA

coffee



oil



minerals

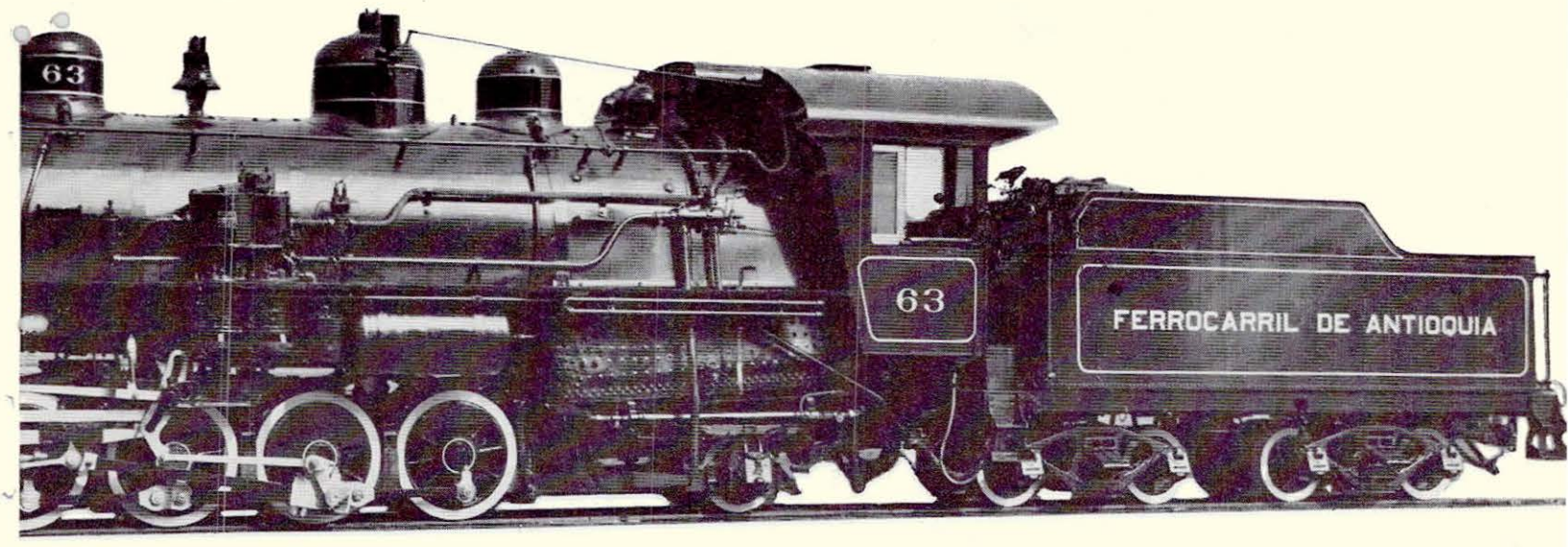
sugar

. . more Baldwins for Colombia

A third larger in area than the Pacific Coast states of Washington, Oregon and California combined, Colombia is another South American neighbor that is using Baldwin locomotives to help develop and market the country's rich natural resources.

Colombia is a leading producer of coffee, as well as cotton, tobacco, oil, cocoa, sugar and bananas. Platinum, gold, silver, lead, copper and other minerals come from the country's mines. The land rises from low-lying eastern plains to 18,400-foot peaks in the Cordilleras, and so poses a real problem in rail transportation.

During the past two years the railroads of Colombia have ordered a total of 32 Baldwin locomotives, including fourteen of these 2-8-2 type for the Antioquia Railway. In the native language, as in other countries all over the globe, "Baldwin" stands for dependable motive power. The Baldwin Locomotive Works, Phila. 42, Pa., U.S.A. Offices: Philadelphia, New York, Chicago, St. Louis, Washington, Boston, San Francisco, Cleveland, Detroit, Pittsburgh, Houston, Birmingham, Norfolk.



BALDWIN

BLW THE BALDWIN GROUP

LOCOMOTIVES

LOAD CARRYING *Plus* SNUBBING

The Holland Ride-Ease Volute Truck Spring STYLE C-200

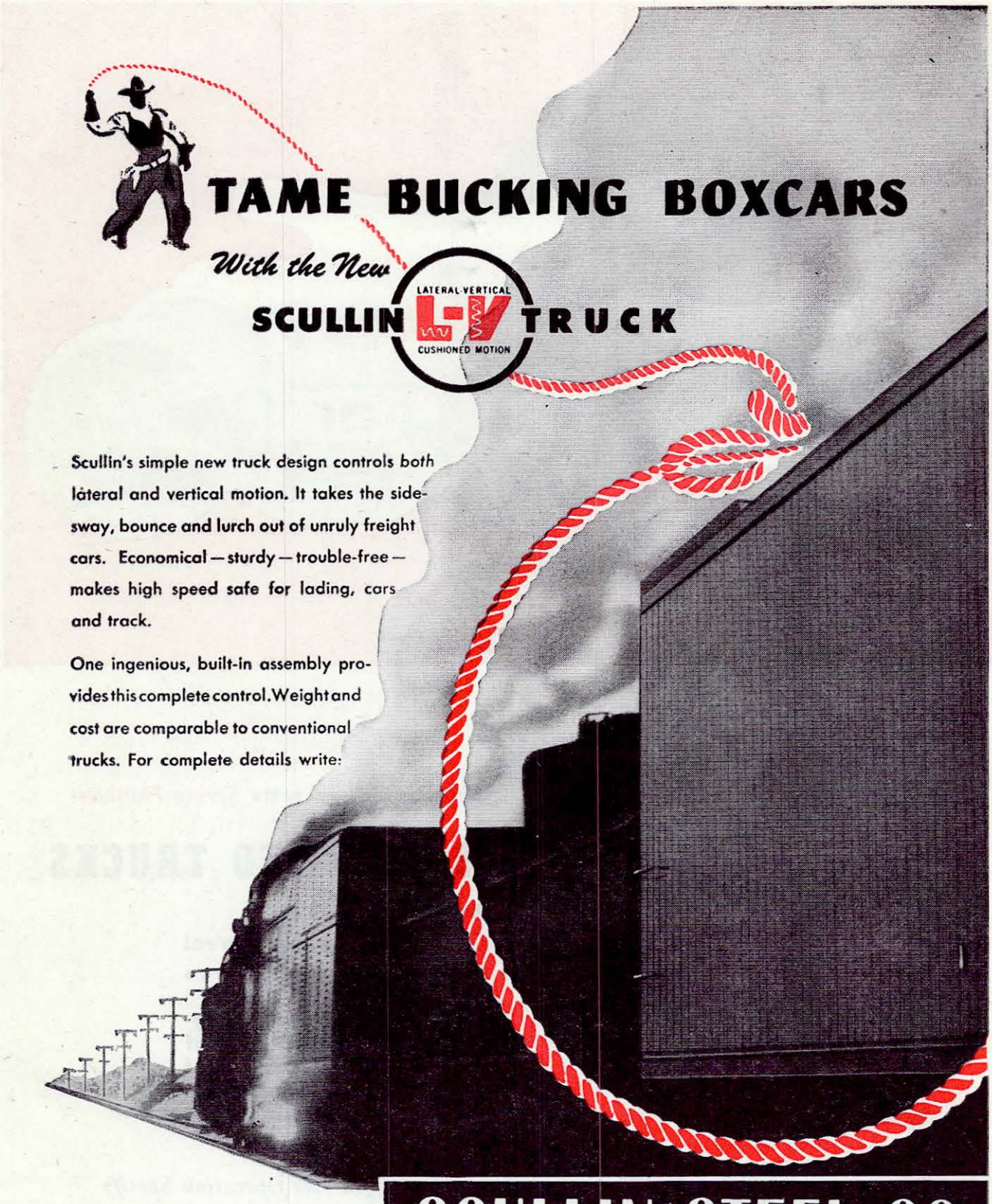
The Holland *Ride-Ease* Volute Truck Spring, Style C-200, having load-carrying-plus-snubbing characteristics, is a revolutionary development.

Satisfy yourself as to what these new Style C-200 Spring Nests will do for your equipment by installing them under one of your tenders in high speed service. In co-operation with your engineers, we'll furnish instruments to make recordings of riding qualities, "Before and After." Write for Bulletin No. 13.

HOLLAND COMPANY

332 SOUTH MICHIGAN AVENUE, CHICAGO, ILLINOIS

1759



TAME BUCKING BOXCARS

With the New

SCULLIN LATERAL-VERTICAL CUSHIONED MOTION TRUCK

Scullin's simple new truck design controls *both* lateral and vertical motion. It takes the side-sway, bounce and lurch out of unruly freight cars. Economical—sturdy—trouble-free—makes high speed safe for lading, cars and track.

One ingenious, built-in assembly provides this complete control. Weight and cost are comparable to conventional trucks. For complete details write:

ARMY NAVY

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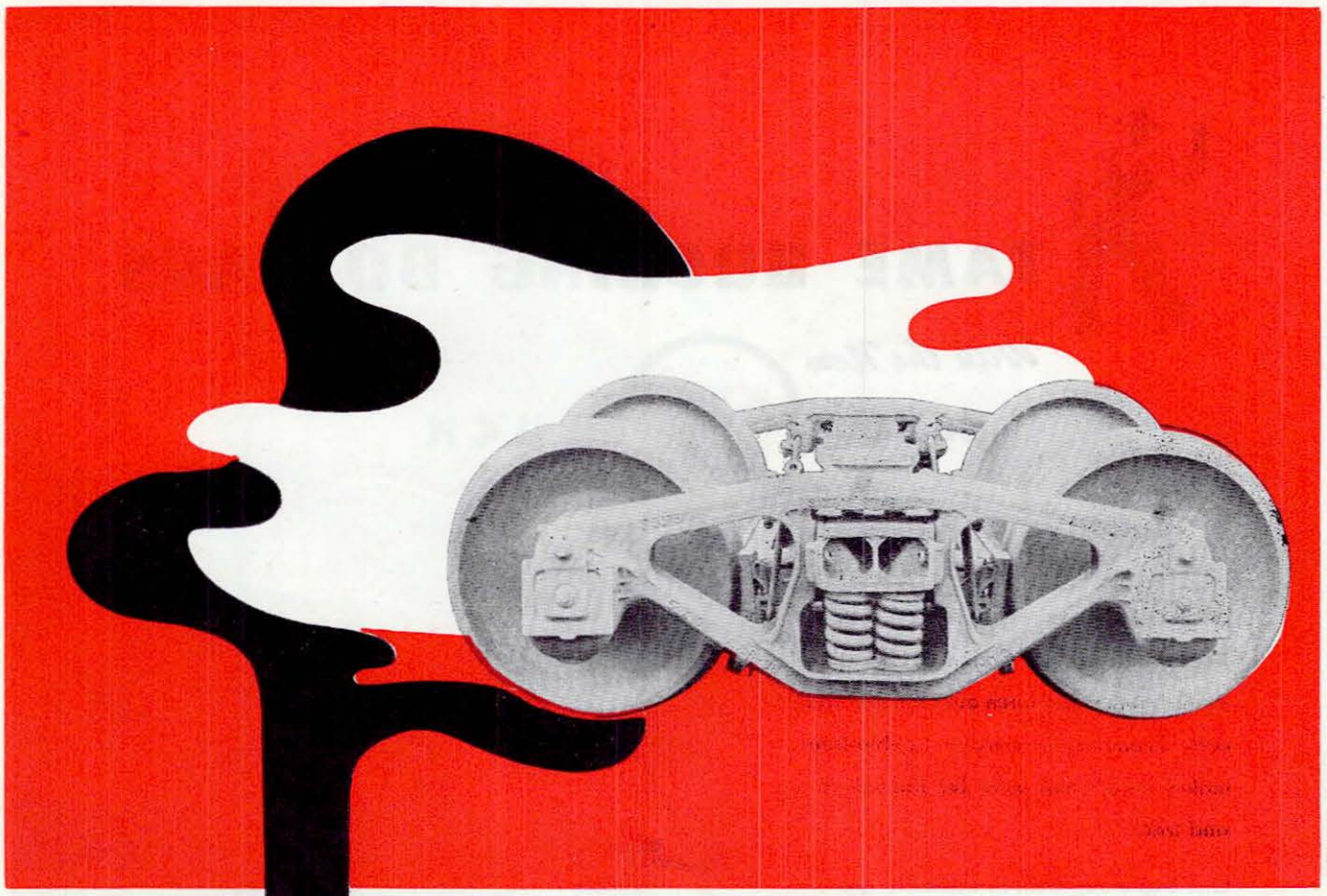
SAINT LOUIS 10, MISSOURI

STEEL CASTING MANUFACTURERS SINCE 1899

NEW YORK • CHICAGO • PHILADELPHIA • CLEVELAND • ST. PAUL • BALTIMORE • RICHMOND, VA.



now . . . after extensive tests *Spring-Plankless*

BARBER STABILIZED TRUCKS

are available with
2-1/2", 3", or 3-13/16" spring travel
using conventional side frames

Friction castings are of long-life alloy iron. Truck is of spring-plankless design. If desired, tie rod construction between side frames can be used.

Over 110,000 car sets of BARBER STABILIZED TRUCKS are in use on 57 different railroads and private car lines

For Dependable Freight Car Operation Specify
BARBER STABILIZED TRUCKS

STANDARD CAR TRUCK CO.

332 South Michigan Avenue, Chicago 4, Illinois

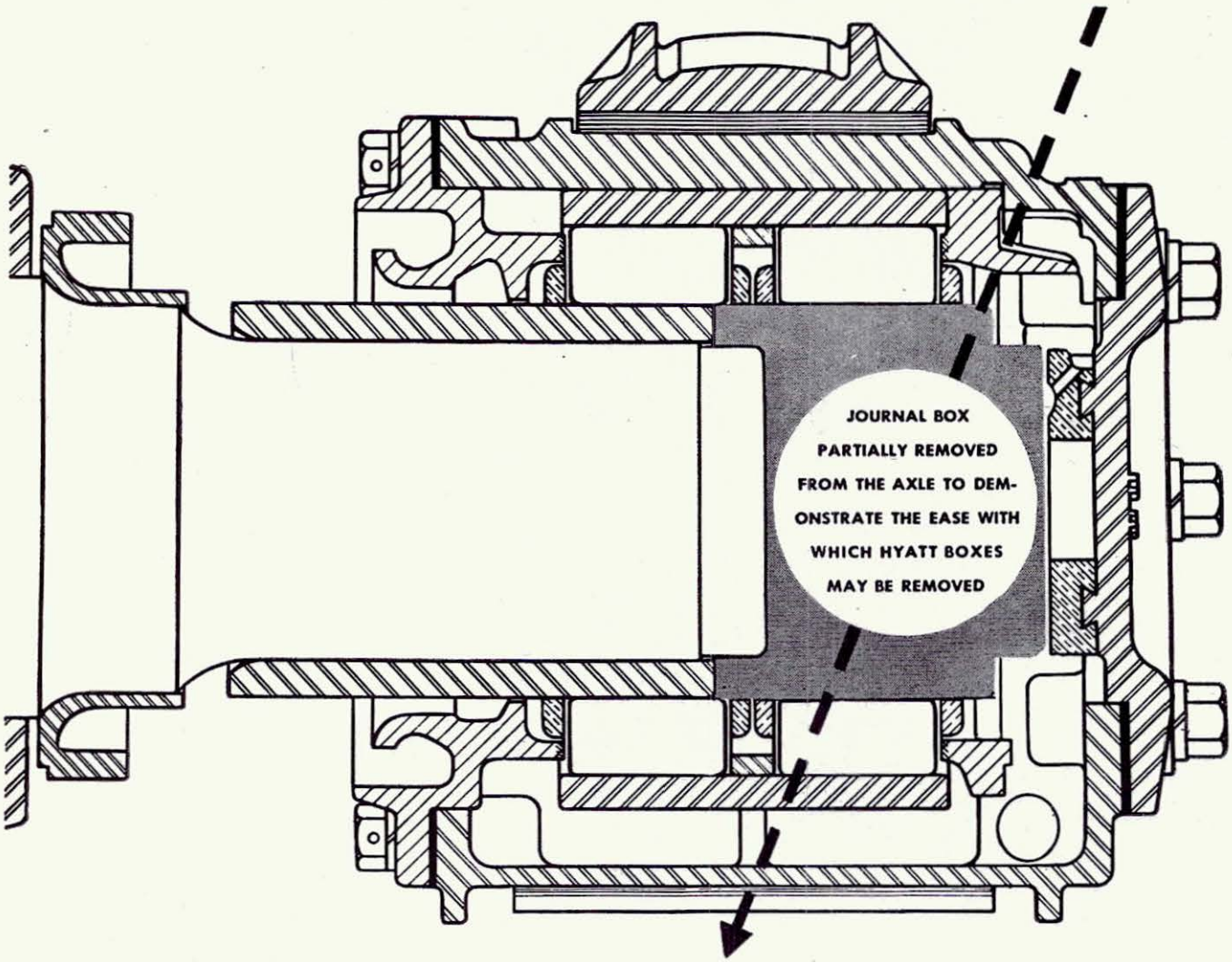
Your rail joint maintenance problem is simple when you use RMC Rail Joint Packing, for it is as permanent as the joint itself. RMC Packing has been used successfully on most of the major roads to reduce joint freezing caused by corrosion.

RAILWAY MAINTENANCE CORP.

PITTSBURGH 30, PENNSYLVANIA

DESIGNED FOR COMPLETE INTERCHANGEABILITY

JOURNAL BOXES: HYATT



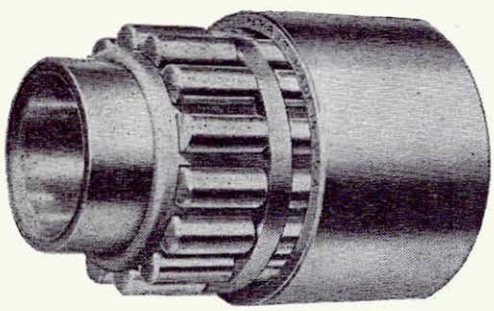
Hyatt railroad journal applications are designed so that the journal boxes are removable and interchangeable.

When a Hyatt journal box is removed from an axle, the box, outer race, and roller assemblies slide off as a unit, leaving the inner race on the journal. Any Hyatt journal box of similar design can then be substituted for the one removed.

Thus investment in spares is reduced because, with Hyatts, spare axle sets need be equipped with inner races and water guards only, instead of complete journal boxes.

Interchangeability combined with Free Lateral, Reduced Axle Stress, Advanced Design and many other Hyatt features are responsible for the ever-growing preference for Hyatt Roller Bearing Railroad Journal Boxes.

If you are planning the purchase of new cars, or the changeover of existing equipment, investigate the advantages of Hyatt Roller Bearing Railroad Journal Boxes. For further details, write to the Hyatt Bearings Division, General Motors Corporation, Harrison, New Jersey.



Hyatt Railroad Type Roller Bearing partially disassembled to show construction.

HYATT ROLLER BEARING RAILROAD JOURNAL BOXES

Railway Age

With which are incorporated the Railway Review, the Railway Gazette, and the Railway Age-Gazette. Name registered in U. S. Patent Office.

Vol. 121 August 31, 1946 No. 9

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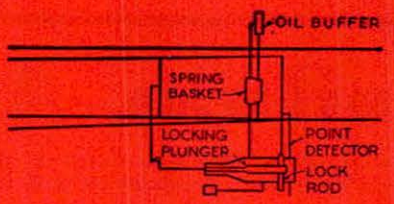
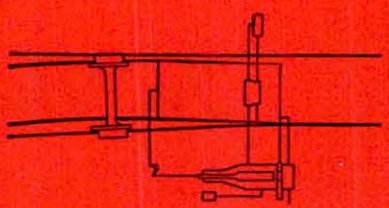
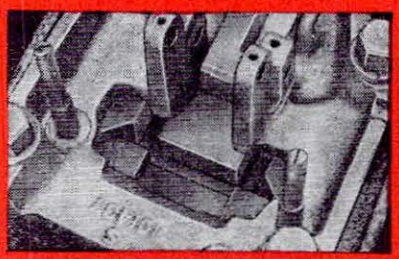
THIS IS WHAT HAPPENS . . .

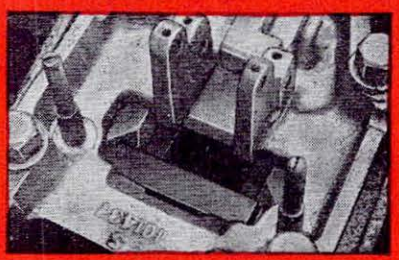


In the normal position of the spring switch, the standard lock rod (1) is locked by the locking plunger (2) of the Mechanical F.P. Lock.

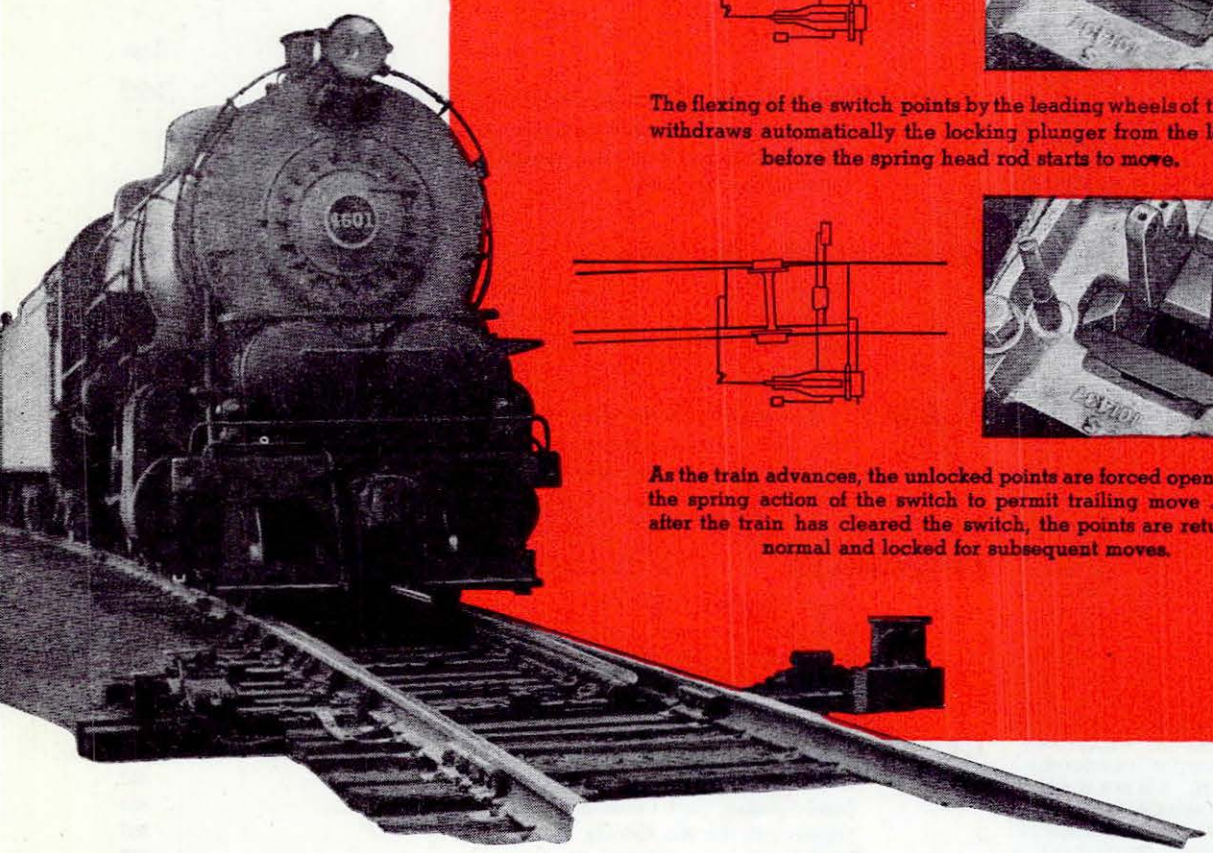




The flexing of the switch points by the leading wheels of the train withdraws automatically the locking plunger from the lock rod before the spring head rod starts to move.



As the train advances, the unlocked points are forced open against the spring action of the switch to permit trailing move . . . and after the train has cleared the switch, the points are returned to normal and locked for subsequent moves.



. . . when a train trails a spring switch equipped with a "Union" Mechanical F. P. Lock!

FOR trailing moves against the closed point, the "Union" Mechanical Facing Point Lock retains all of the advantages of the spring switch. In addition, high-speed, facing-point, main-line moves can be permitted safely because the mechanism securely locks the switch points against movement from the impact and vibration caused by a passing train. A built-in circuit controller for signal control checks the positions of the locking plunger and the switch points . . . "Union" Mechanical Facing Point Locks also have reduced operating costs, decreased train running time and, in some instances, have effected fuel savings sufficient to pay for the costs of the installations in a surprisingly short time.

UNION SWITCH & SIGNAL COMPANY

SWISSVALE PENNSYLVANIA

NEW YORK CHICAGO ST. LOUIS SAN FRANCISCO

The Week at a Glance

DISTRICT 50's DEMANDS: In the current Long Island wage controversy, involving a few hundred employees, is another example of recent union-government team-work to foment industrial warfare and, as a consequence, to make the survival of private business institutions a little more difficult. The leading editorial in this issue comments on the political circumstances that make it possible for powerful labor union dictators to challenge with apparent immunity the normal procedures of conciliation and negotiation that have prevailed in the railroad industry (among others), procedures which the more conservative and far-seeing labor leaders find it difficult to adhere to when irresponsible and pugnacious bosses, secure in their political alliances, challenge such policies. The cure for such conditions is not concessions to the brashest union tyrants, but a change in governmental attitude toward their high-handed methods.

●

BRITISH PROPOSAL: With a government threat of "nationalization" hanging over their heads, leaders in the British transportation industry have come up with a plan to coordinate truck and rail operations in that country which they suggest as a means to achieve many of the benefits which are said to flow from government operation without at the same time foregoing those advantages which they, in a politically old-fashioned way, attribute to private enterprise. Details appear in the news columns.

●

LOCHINVAR: During the war the railroads made some money. There seem to be quite a few people, politicians particularly, who can't stomach this rather novel situation and therefore appear determined to take it all away from them as fast as possible. Among the practitioners of this brand of economic statesmanship Senator Taylor of Idaho is rapidly forging to the front. Out of the West he has come as another agile, outspoken and precocious freight rate authority, whose attacks on the railroads' probity and patriotism appear to be founded on the peculiar doctrine that the only way the carriers could make a profit out of hauling materials all through the war for their biggest customer—the government—was by finagling exorbitant rates. As the news pages indicate, it appears that the senator considers it much less reprehensible for the government to subsidize what is supposed to be a private business than it is for that business to make a profit out of its operations.

●

MODERN YARD MANAGEMENT: Where a yard is spread over an extended area and a number of crews are at work, the yardmaster's job of coordinating the activities of all crews under the variable conditions inseparable from railroad operations has required a lot of physical exercise. The Southern has put to effective use in its Pratt yard, at Birmingham, Ala., a two-way loud-speaker system of yard communication that eliminates much of this labor. As reported in an illustrated article this week, the yardmaster is able to sit in an air-conditioned office 40 ft. above the ground, commanding a view of the whole area, and from that point of vantage to maintain close contact with all the crews under his supervision, thus saving time, avoiding delays, and correcting inefficient switching. Two types of loud speakers are employed. The talk-back type permits two-way conversations under yard conditions, as they can be heard for 200 ft. or more and will pick up conversation within 25 to 50 ft. These are placed at appropriate points about the yard, and they are supplemented by the more powerful paging speakers, with a range of 1,000 ft. or so, which are used to establish contact with employees not within reach of the talk-back units.

●

CHICKENS COME HOME: What to do about the freight car shortage appears at last to have become one of the major worries of those government officials who are still in Washington. Of course Colonel Johnson could point out that he, and not a few other well-informed people, told the material allocators a long while ago that their failure then to provide enough steel and other products to build freight cars would make trouble later. The trouble is here (and it's fortunate for the country that it has come in a time of peace, and not while the war is still going on). Now the builders are being told to build cars, the railroads are being told to patch up those that have worn out, and the shippers are being told to upset their work schedules so cars can be released more promptly. Obviously not a lot else can be done at the moment to relieve a car shortage that already has developed. But much could have been done in the past to avert it, and much might be done now and later to correct conditions which have made it more serious, an editorial this week observes, if those who shape government policies were less determined than they appear to be to prevent the railroads from functioning successfully as going business enterprises.

●

CONVENTION PROGRAMS: Subjects of speeches and papers to be heard during the concurrent conventions of the Roadmasters' and Bridge and Building Associations, scheduled for September 17 to 19 in Chicago, are listed in this issue's news pages.

●

NEWS IN BRIEF: Secretary Wallace has told the Civil Aeronautics Board it should rewrite its definitions to make it easier for anyone who wants to get into the business to operate airplanes. . . . The C. & O. objects to the I. C. C. examiner's finding that it mustn't make a profit selling Wheeling stock to the Nickel Plate. . . . Canadian National employees have signed up for a wage increase of ten cents an hour. . . . Air-mail tonnage in this year's first four months dropped more than 40 per cent under last year. . . . Bituminous Coal Research has ordered two coal-burning gas turbines for use in test locomotives soon to be built.

BEST INSURANCE: While informed opinion is crystallizing as to what is best in the way of provisions for protecting Diesel-electric locomotives from fire damage it would appear, an editorial suggests, to be good judgment to go ahead with the installation of equipment that is available, and which many men of experience consider essential, even if it should develop later that errors have been made in the direction of over-caution.

●

ALUMINUM TRUSSES: One of this issue's feature articles explains how steel roof trusses of an enginehouse, badly corroded by stack gases, have been replaced with trusses fabricated from aluminum alloy structural shapes and rivets. The designs were developed for steel when it was expected that aluminum would not be available, yet only relatively minor changes were necessary to adapt them to the more resistant metal. The new trusses weigh 1,805 lb. each as compared with 4,255 lb. in the steel design.

●

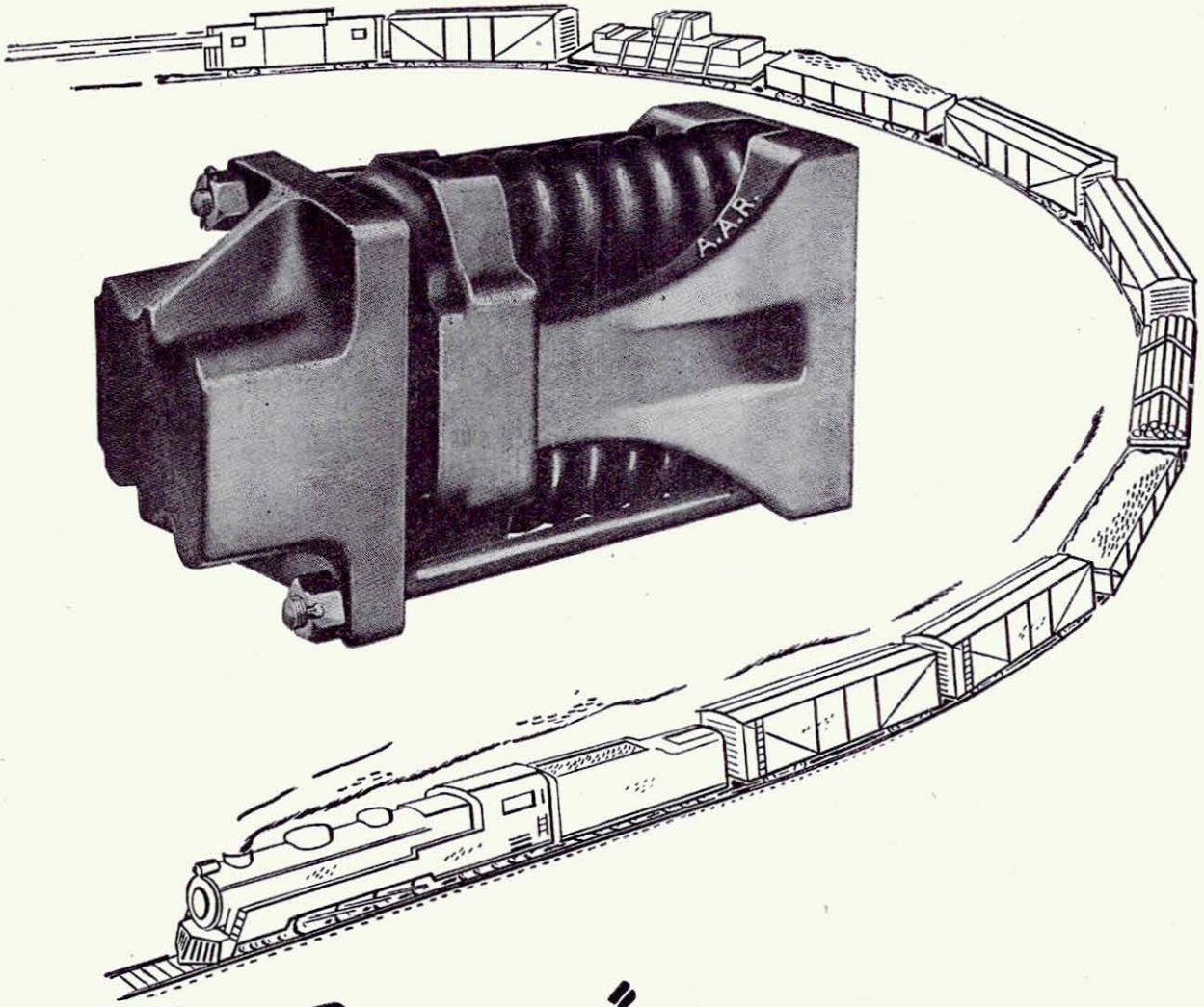
RADIO VS. TUNNELS: A recent experiment on the Baltimore & Ohio, reported on page 373, appears to indicate substantial progress toward conquering one of the difficulties heretofore associated with train radio communication, that is, loss of signal strength in tunnels. By the use of "collector antennas" outside the tunnel, adjacent to the entrances, and a connecting shielded wire, continuous communication was maintained between front and rear of train and between an outside station and the train without appreciable effect on reception.

●

E. J. & E. ENGINE: The Elgin, Joliet & Eastern has recently put in service a 2,000-hp. single-unit Baldwin-Westinghouse Diesel-electric transfer locomotive, described and illustrated in an article on page 371. Two four-stroke eight-cylinder Diesel engines are employed with a cab-in-center arrangement. All the weight (365,000 lb.) is carried on six pairs of drivers. The top operating speed is 60 m.p.h., the starting tractive effort 91,250 lb. Chrome-plated cylinder liners and oil-cooled aluminum alloy pistons are used.

●

DIESELS OVER THE ROCKIES: The Rio Grande was not exceptional during the war in having an unprecedented amount of traffic to handle, but the conditions under which that traffic had to be handled—including 50 below zero weather, 10,000 ft. altitudes, 2.2 per cent grades unbroken for 40 miles, and curvature characteristic of the most rugged topography—particularly tested the mettle of its men and the capacity of its equipment. An article in this issue outlines the job this railroad had to do, and indicates how its Diesel-electric locomotives have been utilized to make the most of their power and availability. On this line where sustained high speeds are impracticable, freight Diesels have been used in passenger service when lulls in freight traffic have afforded suitable opportunities.



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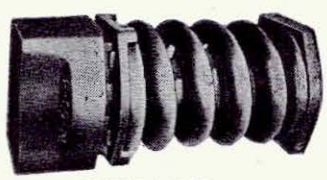

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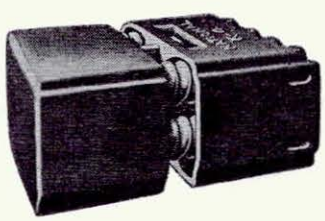

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RAILWAY AGE

Wage Controversy Revived

Last week's near strike of Long Island trainmen, members of an appendage to John L. Lewis' miners' union, again draws attention to the fatal corruption which politics has infused into labor relations and which it stubbornly refuses to correct or even mitigate. Meantime the show-down in this particular dispute is temporarily postponed while a fact-finding board examines the merits of the demands of the malcontents.

The wages and working conditions of railroad employees were supposed to have been definitely settled, at least for a year, by the increase of 18½ cents per hour, conceded by the railroads last May at the suggestion of the White House. It will be remembered that, when A. F. Whitney and Alvanley Johnston held out for concessions in addition to this settlement at 18½ cents, President Truman went on the radio and denounced them roundly. The present trouble on the Long Island is an exact parallel to the action of the union leaders whom Mr. Truman excoriated—that is, it involves a threat by a small minority of employees to tie up an entire railroad because they refuse to acquiesce in the 18½ cents per hour settlement which all other employees accepted and which the enginemen and trainmen were unsuccessful last May in overturning. This time, however, Mr. Truman has not denounced the leader of the recalcitrant union but, instead, has appointed a fact-finding board to inquire into the union's grievances. The Goddess of Justice, it seems, has taken a peek out from under her blindfold, and has decided not to offend a notably hard-boiled union chief who has upwards of 400,000 votes at his disposal.

Politicians in the Saddle

There is no man in this country better informed on labor relations and union behavior than Leo Wolman, professor of economics at Columbia University and for many years actively engaged in union work. In a recent address he diagnosed the malady from which industrial relations are suffering as lying in the decision of the political authorities that "you could run the American economy only if all its labor fell into private, irresponsible hands." "There is no use talking about personalities," he went on to say, "because it'll be Petrillo last week, Lewis now, Whitney later, Bridges and Curran two weeks from now. . . . Individuals don't count in this. It's a system, and you've got to get at the roots of the system."

Professor Wolman goes on to explain that labor unions are political organizations, with political leaders as their chiefs. These positions, like all political positions, cannot be held by men content to "sit still." They have to fight for something all the time—and such fights require constant agitation of the unions' membership, which accounts for the content of union periodicals, i. e., "an open invitation to confusion." "Nobody can tell me," Professor Wolman concludes, "that this method produces a rational frame of mind and leads toward peaceful settlement."

Other features of the present set-up seen by Professor Wolman as inviting industrial warfare include (1) the partisanship of the federal government in forcing employees into unions whether they wish to join or not; (2) active support of strikes by public authorities; (3) reduction in the power of management (e. g., by the support given the organization of foremen by the federal bureaucracy); and (4) the supplanting of ordinary law by "administrative law"—i. e., rulings of regulatory tribunals which are based on no recognized principles: "You don't know what they are going to do, and you don't know what their reasons are."

Not a Time for Concessions

Extensive corroboration from the field of labor relations on the railroads of Professor Wolman's observations of the situation in general is afforded in an article entitled "The Railway Labor Act and Labor Disputes" in the June issue of the American Economic Review. The author is H. R. Northrup, an independent scholar whose article testifies to his competence, thoroughness, and disinterestedness. After reviewing dispassionately the principal railway labor disputes and the disposition made of them since 1941, he concludes that "the attempt to use the Railway Labor Act as the classic example of 'model' labor relations disregards the war-time experience and its import."

The politicians have changed the law to forbid the use of injunctions as a preventive of violence until after it has already occurred; and recent experience with the kind of police protection given to property from strikers bent on mischief, and to employees who wish to continue working, affords little encouragement to union leadership which would prefer to give heed to the criminal law in its rivalry with other leadership which is quite ready to ignore such statutes.

The fact is that, with the law governing labor relations remaining as it is, the unions could not be perma-

nently satisfied even if they should receive the ownership of all industry as a present; and the fault lies less with the leaders of the unions than with the politicians who have established a set of rules which virtually compel unionists to conduct themselves as they do. Indeed, here and there, some leaders of the railway unions have definitely shown their preference for procedure on a higher plane of responsibility, as witness the action of President George M. Harrison of the Brotherhood of Railway Clerks who, toward the end of June, joined with President L. O. Head of the Railway Express Agency in urging employees of the Agency, engaged in an unauthorized "work stoppage," to return to their jobs.

Be that as it may, the President of the United States has now seen fit to acquiesce in reopening the whole question of train service wages and working conditions —especially those in "short turn-around" service—to the competitive advantage of John L. Lewis who seeks to disrupt existing union leadership on the railroads. As Professor Wolman observes: "Employers aren't close enough to their labor. They have allowed an outsider (and, I think, an irresponsible outsider) to come in and break up their relations with their labor." Whether employers can correct this situation remains to be seen, but the first step in any cure is accurate diagnosis; and such diagnosis makes it crystal clear that additional concessions to the unions will be of no help whatever in the establishment of peace.

Fire Prevention and Protection for Diesels

Among the new problems arising from the operation of the Diesel-electric locomotive which were unanticipated at the outset of Diesel locomotive installations is that of determining what preventive and protection measures are needed to eliminate the fire losses which have developed in this type of motive power, and how extensive they should be. That the problem is one needing attention was evident during the presentation of the locomotive construction report at the recent annual meeting of the Mechanical Division of the Association of American Railroads.

Like other aspects of Diesel operation and maintenance, the years of experience with steam power do not provide the background to mechanical department men for coping with this particular problem because the steam locomotive, except for a few cab parts, is immune to destruction by fires—at least, those arising within the locomotive itself. Undoubtedly that experience is partially responsible for the lack of preparedness for the unexpected losses that have already resulted from fire damage to Diesel locomotives.

But enough fires have occurred and the losses from them have been sufficiently large so that all operators of Diesel locomotives now are apparently aware of the situation and of the need for some provisions for fire protection. This, at least, was the evidence of the discussion of that section of the committee's report dealing with the proposed measures for the prevention of Diesel fires. The report submitted by the committee was formulated as the result of a joint meeting with the sub-committee of the Fire Protection and Insurance Section of the A. A. R. and its suggestions dealt both with fire prevention and fire protection. Those dealing with prevention pointed out specifically the need for attention in the design of the locomotives to make good housekeeping easier. The need is for the elimination of nooks and crannies where combustible materials, particularly oil-saturated dirt, can accumulate, as leakage of some oil from piping and fuel tanks is practically impossible to prevent.

In the discussion no one disputed the need for improving the standards of housekeeping, but when it came to the committee's recommendations of measures for fire protection, considerable differences of opinion were voiced. Doubt was expressed as to the advisability of prescribing a cure for an affliction the causes of which have not yet been diagnosed accurately. Too many of the Diesel locomotive fires have resulted in the destruction of the evidence needed by the investigators for the determination of the causes. Reluctance was also evident to go along whole-heartedly with the proposed minimum requirement of 200 gallons of water available solely for fire-protection purposes.

The objections raised to the minimum protective requirements proposed by the committee did not in any way present convincing arguments against the need for protective equipment and it would seem to be good judgment to abide by the suggestions of the committee as far as possible in the installation of fire-fighting facilities until subsequent experience proves them to be either excessive or inadequate. The relatively small expenditure for fire protection should be considered as insurance against loss of human life and of the investment represented by the Diesel locomotives themselves.

Transportation Shortage—Whose Fault?

There has been a continuous shortage of freight cars on the railroads since the late summer of 1943, and the deficiency in this equipment is far more severe now than it has ever been before. The shortages experienced in the fall of 1943 and throughout 1944 were, in practically every week, offset by car *surpluses* which exceeded the shortages. That is, there was actually no *net* shortage at all—but just a lag in the proper distribution of cars. In the first four months of 1945, however, a *real* shortage of cars developed, i. e., the surplus was smaller than the shortage. Thereafter conditions improved and, while shortages continued to be reported throughout the year, the surplus totals usually greatly exceeded those of shortage.

This was the situation during the early months of 1946—but by the middle of June this year the shortage exceeded the surplus by 1,500 cars. By the middle of July the net shortage had mounted to 5,000 cars, and on August 10 the net shortage exceeded 20,000 cars. These shortages are only in railroad-owned cars. There are additional shortages in private car line equipment, e. g., in refrigerator cars. Since the end of the war, the railroads have been retiring cars in bad condition much more rapidly than new cars have been built. There were almost 40,000 fewer serv-

iceable railroad-owned cars on line at the beginning of August, this year, than there were when the war ended.

The railroads had 37,000 freight cars on order on January 1 this year, but received and placed in service less than 22,000 new freight cars in the first seven months of the year, and as a result of having placed additional orders had 49,000 on order on August 1. The primary difficulty, of course, lies in the shortage of materials—but there is no doubt that the railroads have not yet even *ordered* enough freight cars to meet the quite evident demand which will face them during the next 18 months. It would require at least 50,000 additional cars merely to offset the August shortages—which may well become more severe as the season advances—and this would provide no cars at all for replacement of the many thousands of old cars that should be scrapped, nor to take care of increasing traffic which is practically certain to be available by next year.

It is unlikely that the railroads, in spite of their current disastrously poor earnings, will continue indefinitely to withhold orders for cars that they are still able to buy—but their customers themselves, and the public generally, have some responsibility in the matter, i. e., to indicate their willingness to pay enough in rates for railroad service to justify the railroads in providing it. Some people make a great deal of the fact that the railroads can get equipment loans at an interest cost of less than 2 per cent—but 2 per cent is a lot more money than railroad owners made on their investment in the first half of 1946, when the railroads as a whole incurred a deficit. Condemning the railroads to profitless operation—with existing and prospective traffic at levels far above the highest peace-time records—is wholly unrealistic, if the nation expects to secure, from private enterprise, the adequacy of transportation service without which it cannot hope to enjoy a full measure of peace-time prosperity, or face with confidence another military crisis.

The country gets its supply of waterway, highway, and aviation facilities by voting large outlays of public money for their construction—which Congress lost no time in doing to the tune of many billions of dollars, as soon as the war ended. By contrast, the only way *privately financed* transportation can provide itself with funds for additions and improvements is to hold out a hope to investors that the money they put into such facilities will receive a reasonable return. This assurance the Interstate Commerce Commission is persistently refusing to give. Proceedings in the pending rate increase case, which it had been hoped might be concluded in time to give the railroads a reasonable level of earnings for the last two months of the year, have now been prolonged to delay remedial action, probably until the end of the year.

Potential prosperity on an unprecedented scale exists for every American and for every basic industry, including the railroad industry—but the politicians and bureaucrats can strangle it if they work hard enough at it. If they are bound and determined to shut off prosperity for the railroads, they will inevitably kill it off for everybody else as well—because there cannot be a high level of production in this country so long as necessary transportation is lacking, and adequate transportation will not be forthcoming unless investors are given reasonable assurance that money they put into the railroads will be adequately compensated.

Substitute Crossties

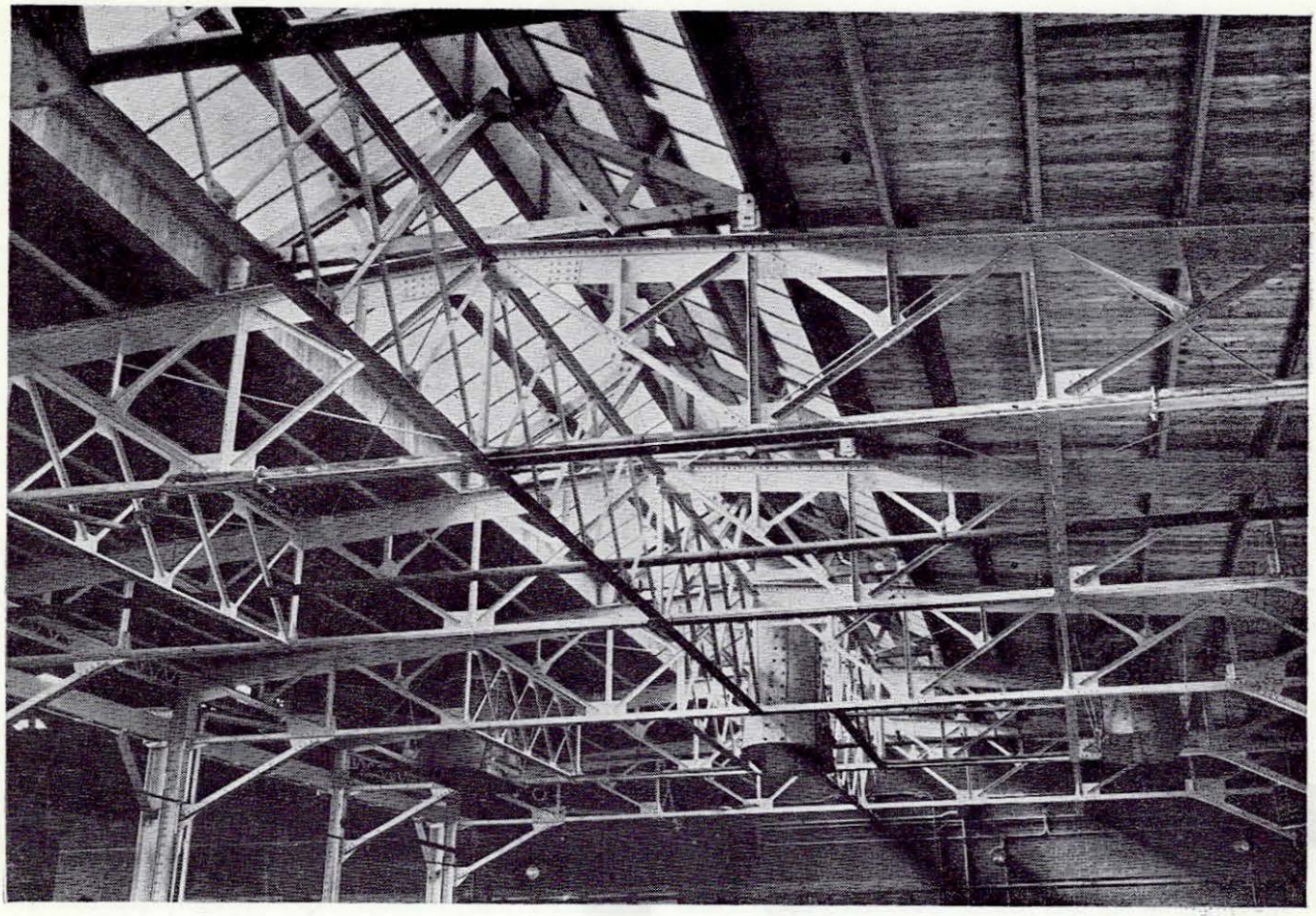
An underlying thought in the minds of many track men is the possibility that some day it may be necessary for the railroads to adopt and use widely a substitute for the timber crosstie. This thought remains largely dormant during periods when timber crossties are in good supply and when overall costs are not out of line, but with every shortage or threatened shortage, accompanied by increasing costs, it comes to the surface.

There is some thinking in this direction right now. It has been generated both by the shortage of ties, which shows little immediate sign of abating, and, of even greater importance, by the increasing costs of procuring and inserting them. To offset higher tie costs, the railroads must attempt either one or both of two things: (1) reduce the initial cost of crossties, an unlikely prospect, and (2) make ties last longer so that the initial cost and that of making renewals will be spread over a longer period.

It is with these objectives in mind, as well as that of assuring a dependable supply of crossties, that the question of using substitute ties has again come up. Ties of steel and of reinforced concrete are possible substitutes that have received the most serious consideration in the past. But the use of such ties is attended with difficulties and disadvantages that are about as great today as ever. Other possibilities are being mentioned, including plastic ties, and those made of laminated glued lumber, which may be more readily procurable than full-size tie timber. So far though the thinking in this direction has been based more on hopeful conjecture than on tangible developments.

In the absence of a satisfactory substitute crosstie, the most logical course is to evaluate the possibilities of further improvement of the timber tie to lengthen its service life. The performance of such ties, carefully produced and seasoned, has been greatly enhanced by modern methods of preservative treatment. If the problem of mechanical damage could now be solved there would doubtless be little further interest in substitutes.

Thus far the major efforts to reduce mechanical damage have been in the direction of providing better protection for crossties against abrasion, crushing, spike killing, etc., but the results have not been too encouraging. In view of this, perhaps it is time to attack the problem from another perspective, as suggested by W. J. Burton, assistant to the chief engineer of the Missouri Pacific, in an address before the recent annual meeting of the Tie Producers Association—that of making the ties themselves more resistant to mechanical damage. More specifically, Mr. Burton referred to a process in which wood is converted into an extremely hard material by impregnating it with a plastic that fills all the voids, if not the wood cells also. Unquestionably, if such a process could be applied to ties economically—at least in those areas in the vicinity of the tie-plate seats—the present serious problem of mechanical damage would be dealt a body blow.



Interior of the enginehouse showing the aluminum alloy trusses in place

Engine House Gets Aluminum Roof Trusses

Replace former steel construction which had become seriously weakened by corrosion due to locomotive stack gases

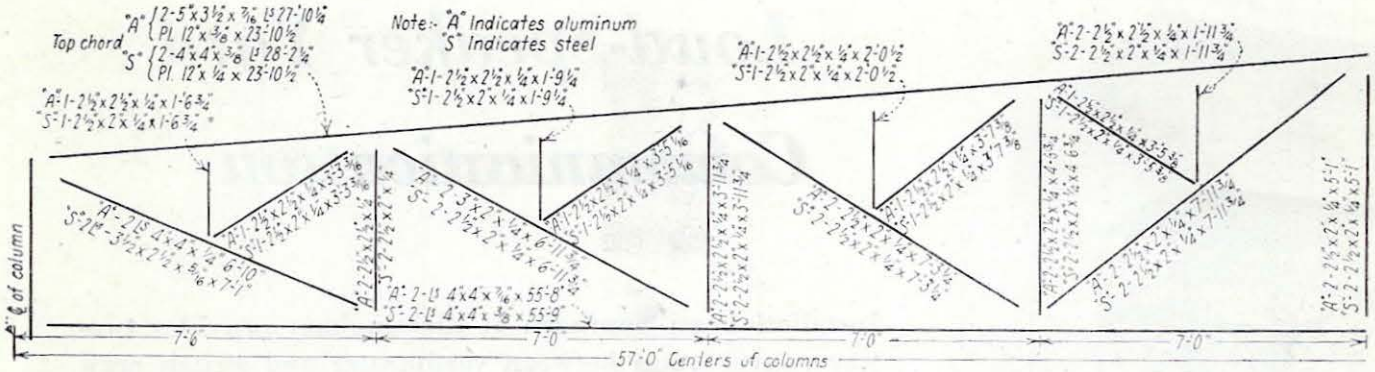
AN unusual departure from conventional roof truss design was introduced recently when the Alton & Southern replaced several badly corroded steel roof trusses in its enginehouse at East St. Louis, Ill., with new trusses fabricated entirely from aluminum alloy structural shapes and rivets. Aluminum was selected for the renewals because of its known resistance to the corrosive conditions which had caused the early destruction of the steel trusses.

The enginehouse is a three-bay structure, with a high center bay and flanking lower bays to the north and south, the high bay and north bay having been constructed in 1912 as a car barn by an interurban line, and purchased by the A. & S. in 1920. The lower south bay, built a few years ago as an addition, with timber roof trusses, does not enter into the considerations of this article, nor does the north bay, which is used as a repair shop, even though it has a steel roof structure. The problem lay in the high center bay, used for locomotive repairs, where the roof trusses had become seriously weakened by corrosion from locomotive stack gases.

The center bay, with three longtudinal tracks, is approximately 57 ft. wide, and extends for 112 ft. to a machine shop at its west end, from which it is separated by a brick wall. In the original design, a monitor was located continuously along the center line of the roof, supported on eight steel trusses of 57-ft. span, which also carried the sloping roof decks on each side. Six of these trusses were located in the locomotive repair section of the bay. Subsequently, when the building was diverted from housing street cars to housing locomotives, two wooden smokejacks were installed above each of the three locomotive tracks, supported by steel rods hung from adjacent trusses.

Heavy Loss in Cross Section

Although the building has been used by the railroad as an enginehouse since 1920, it has been used intensively only since 1930. In spite of this, routine inspections in recent years showed progressive weakening of the trusses due to the corrosive action of the sulphurous fumes from locomotives, a condition which was permitted to exist only because of the war-time restrictions on materials that would withstand such conditions. This condition persisted until, of the six trusses in the locomotive



Sketch of a typical truss, indicating the size and composition (A) of the aluminum alloy members. Similar information (S) is shown for the steel members in the original design

section, four were found to have become so badly corroded as to require replacement. A fifth truss had four badly damaged main web members, which could be replaced, while the sixth was not affected appreciably. An indication of the condition of the more seriously affected trusses is seen in the fact that nearly all of their members were reduced in cross section to some extent; some, especially in the top chords, which were subject to the greatest concentration of gases, having remaining as little as 40 to 20 per cent of their original section.

In one truss, the most badly corroded, there was a reduction in area of as much as 80 per cent in the top chord, and of 17 per cent in the lower chord. At the same time, reductions of 12 to 80 per cent were found in 93 per cent of its main web members, and reductions of 42 to 68 per cent in 70 per cent of its secondary members.

Unexpectedly Available

Because of fear of possible collapse of the roof under a heavy snow, immediate repairs were considered necessary. However, structural aluminum, which was preferred for making the renewals, was not then available, and lumber was not adaptable to the conditions existing. Accordingly, it was decided, in spite of the experience with the original steel structure, to use steel again in renewing the four trusses requiring replacement. Before this plan could be placed into effect, however, aluminum became available, and it was then decided to use aluminum alloy structural shapes in the four trusses, and to employ steel only in replacing the damaged web members of the fifth truss. In addition to renewing the roof trusses, certain other changes were planned for the roof, including the replacement of the old monitor with a combination skylight-ventilator construction, and the replacement of the old wooden smokejacks with fire-resistant smokejacks.

With the unexpected opportunity to use structural aluminum in the new trusses, rather than steel, and in the interest of early completion of the work, the original steel design was used almost throughout for the aluminum trusses. In fact, the only changes made were those necessary to obtain the proper cross-sectional areas of a few members to accommodate the design stresses. In general, these changes proved to be relatively minor, as may be seen in the sketch, which shows the sizes of the structural members in both the steel and aluminum designs. In determining the required aluminum sections, a tensile strength of 16,000 p. s. i. was used, following design data set forth in the Alcoa Structural Handbook, but there was no attempt to use the most economical sections in every case since it was more expedient under the circumstances to adhere as closely as possible to the steel design and to use aluminum shapes in sizes most readily available.

The structural shapes in the new trusses are of Alcoa 61S-T aluminum alloy, with all connection rivets of Alcoa 53S-T-61 aluminum alloy. All material was furnished by the Aluminum Company of America, Pittsburgh, Pa., and was fabricated in the shop of Stupp Brothers Bridge & Iron Co., St. Louis, Mo. Prior to assembly, all of the structural shapes were cleaned with a solution of phosphoric acid-alcohol cleaner and were then painted with two coats of zinc chromate paint. All shop rivets were cold driven, but all field rivets were heated to a controlled temperature to insure uniformity of heating. The weight of each of the new trusses is only 1,805 lb., compared with 4,255 lb. in the steel design.

The Fruin-Colnon Contracting Company, St. Louis, erected the trusses, using a single locomotive crane to set each truss as a complete unit. After erection, a new roof deck was applied, consisting of 2-in. by 6-in. yellow pine, covered with a 20-year, bonded, built-up roofing, and the aluminum trusses and two existing steel trusses were given two finish coats of aluminum paint.

The new skylight replacing the old monitor is 14 ft. wide, with an 18-in. ventilator opening in the center throughout its 112-ft. length. The skylight is of corrugated wire-glass sheets, bolted to wood purlins supported by light frame trusses, which, in turn, are carried by the main roof trusses. The corrugated wire glass and fastenings were furnished by the H. H. Robertson Company, Pittsburgh, Pa.

The ventilator has sides of ½-in Johns-Manville Transite sheets, and a cap, or cover, consisting of one-third segments of 36-in. Transite pipe. The six new smokejacks installed are also of Transite, these being supported by aluminum alloy rods hung from wooden frames extending between the top chords of adjacent trusses.

The planning and execution of this work were carried out under the supervision of W. J. Nuebling, chief engineer of the A. & S., East St. Louis.

Poster No. 275, the August installment of "All the Year—Every Year Safety Program" now being distributed by the Safety section, Association of American Railroads

Loud-Speaker Yard Communication

Installation on Southern at Birmingham provides two-way conversation between yardmaster and switch crew foremen at numerous locations in area five miles long

From this tower the yardmaster can see entire yard

IN A large flat freight yard at Birmingham, Ala., the Southern has an extensive loud-speaker communication system which has been in service several months, so the benefits are recognized. Known as Pratt yard, this layout extends east and west about two miles between 27th street and 42nd street. Cars from industries in Birmingham or from inbound road trains are classified, and then made up for departing road trains or for delivery to industrial areas. Approximately 30 inbound and 30 outbound road trains are handled daily, in addition to numerous transfers. On the average about 2,200 cars are moved through this yard daily, of which about 70 per cent are loads.

The yard is in operation three tricks daily, 29 yard locomotive crews being assigned. Each crew includes the conductor, known as the foreman; two switchmen, known as helpers; and the engineman and fireman. One of the helpers follows the engine to pull pins and transfer hand signals to the engineman. The foreman and the other helper, known as the field men, work along the yard lead to throw switches. The yardmaster, one on each trick, has general supervision of the crews, roughly about 10 crews on each trick. Prior to the installation of the loud-speaker system, the yardmaster walked the length of his two-mile yard to coordinate the work of the crews. Now he sits in a glass-enclosed, air-conditioned office in a tower 40 ft. high, located near the center of the yard. On his desk is a loud-speaker, a portable microphone and a console panel which has separate toggle-type keys and indicators, each set of which connects with a circuit extending to one of numerous loud-speakers located at various places throughout the yard.

Paging and Talk-Back Speakers

There are two types of these loud-speakers: (1) the smaller, known as the talk-back type, are used for two-way conversation between the yardmaster and a switch crew foreman; (2) the larger paging speakers are used only when the yardmaster is sending a broadcast call for a particular man to go to one of the talk-back speakers where he can enter into conversation with the yardmaster.

The paging speakers, which have a range of 800 to 1,000 ft., are mounted on high poles or floodlight towers about 55 ft. above the ground. There are seven of these double-mounted, paging-speaker locations so arranged that a man working at any place in the yard is within range of one or more of them. The talk-back speakers are mounted on short pipe masts or wood poles at a level about 8 ft. above ground. Each mast has two speakers, one directed east and the other west. Under average circumstances these speakers can be heard distinctly 200 to 250 ft. They are so constructed that they will pick up sound and transmit it back to the yardmaster and, therefore, are known as talk-back speakers. When standing within a range of 25 to 50 ft. from one of these speakers, a man's voice in ordinary tones will be picked up and reproduced in the loud-speaker in the yardmaster's office, the range being greater when he is in line with the horn, the spread of which is about 70 degrees. These talk-back loud-speaker locations, with two speakers each, are spaced about 200 ft. apart along the switch leads and ladder tracks where crews are working much of the time.

One, and in some instances two, talk-back speakers are located at outlying points, such as the ice house platform, the repair yard, at the yard office and at the far ends of the yards where road

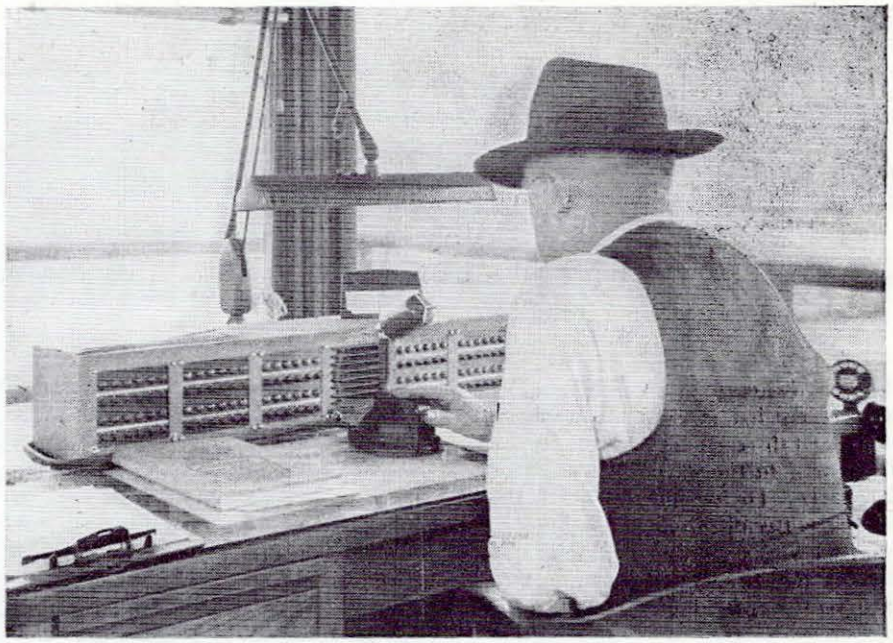
Close-up view of two talk-back speakers on pipe post near switching lead

trains enter and leave the main track. A total of 40 of these double-mounted talk-back speakers are in service in the yard between 29th street and 42nd street. Single speakers are in service at two yard shanties, in the yard office and in the terminal superintendent's office. Additional speakers are used at Woodlawn Junction near 49th street and at certain other house track layouts near downtown Birmingham.

Yardmaster Talks to Foreman

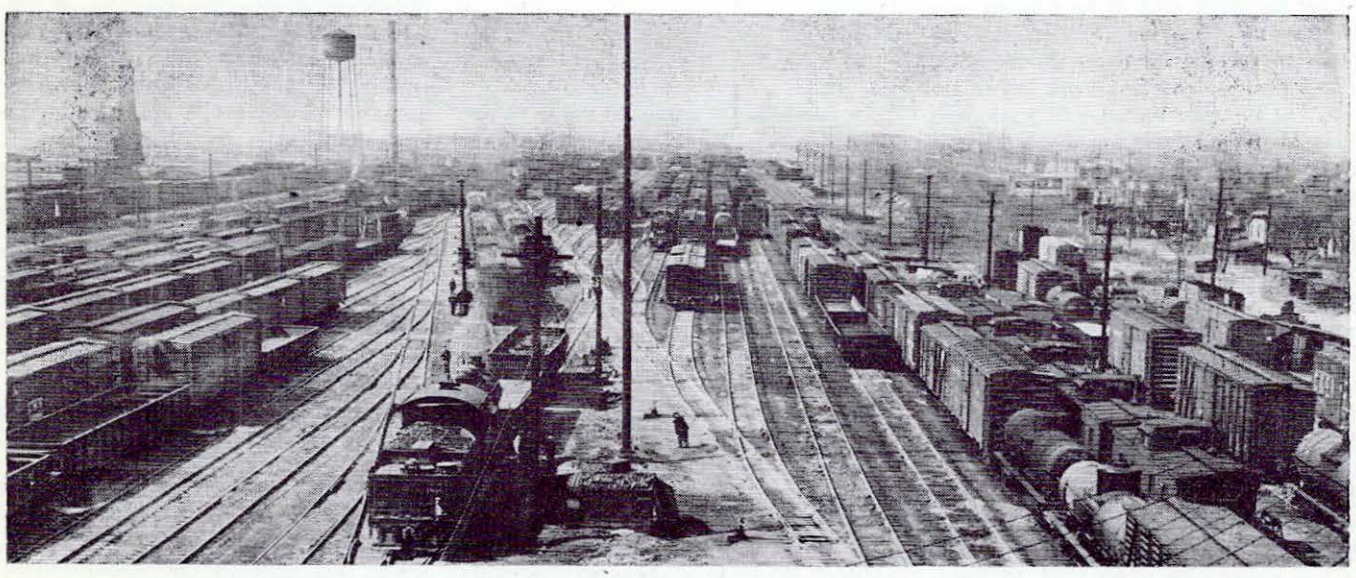
When the yardmaster wants to talk to a switch crew foreman who is working in the vicinity of a specific talk-back speaker, he turns to his console cabinet and throws the small toggle switch for the circuit to that speaker. When speaking into his microphone, the yardmaster operates a push-to-talk switch. When he stops speaking, he releases the switch, which takes his microphone off and connects his loud-speaker, so that when the foreman at the talk-back speaker replies, his speech is reproduced in the yardmaster's office. If the yardmaster calls a certain foreman at one or more of the talk-back speaker locations and gets no answer, he then uses the key to connect his office set to one of the large high-powered paging speakers and broadcasts the call so that the foreman will hear it and go to the nearest talk-back speaker to answer.

When a foreman or any other yard employee desires to talk to the yardmaster, he goes to the nearest talk-back loud-speaker location and pushes a button which actuates a corresponding indicator on the console panel on the yardmaster's desk, and also sounds a buzzer. The yardmaster then throws the key corresponding to this indicator, connecting his office set to that line; he pushes his press-to-talk switch and answers "Tower." Then the foreman at the talk-back speaker location starts the conversation with the yardmaster. Thus this intercommunication system provides two-way conversation between the yardmaster and the foremen of the various switching crews, the ice house platform, the repair track and the yard office, so that the yardmaster can coordinate the work to the best advantage.



The control cabinet is on the yardmaster's desk in the elevated tower

While on the road traveling toward Birmingham, each freight train conductor makes out a list of the cars in his train from front to rear. This list gives the initial and number of the car, as well as other information concerning the lading and destination. It is made with an original and four carbon copies. When the train arrives at Pratt yard, the conductor, with his waybills and lists, is picked up at the caboose and taken by automobile to the yard office. The yard clerk checks the list for possible diversions or reconsignments, and for "no bills." This obviates reswitching of cars which otherwise would have to be placed on the "hold" track first. Also the yard clerk inserts numbers on the list to designate the "block" in which each car is to be classified, as, for example, Atlanta, Chattanooga, Louisville, Cincinnati, Potomac Yard, Mobile, Meridian or New Orleans, as well as cars



View from tower showing the two main switching leads along which are the talk-back speakers

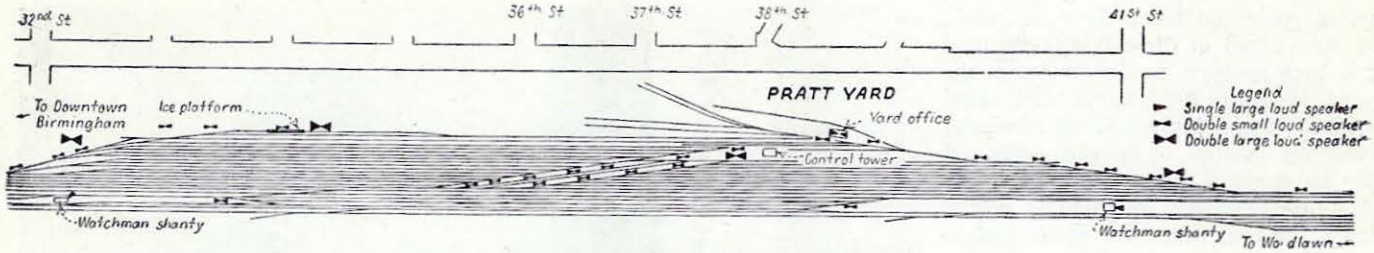


Diagram of the central portion of the yard, excluding both ends, showing locations of tower and the speakers

for local delivery in Birmingham. One copy of the list is retained in the yard office, and three copies are sent by pneumatic tube to the yardmaster's office in the tower. He decides on which track or tracks the different blocks are to be built up, and a copy of the list is delivered to the foreman of the crew which is to do the switching.

How System Helps

The yardmaster, from his vantage point in the tower, is looking directly at each move being made in the entire yard; flood lighting permits such observation at night. By personally observing each move at all times, he instantly sees the cause for delays, inefficient switching, what tracks are occupied by cars, and how many are on each track, and can issue instructions to any crew when necessary. This ability of the yardmaster to observe everything that occurs means much in handling the yard work efficiently, and enhances the advantages of the system as used by the Southern.

The examples in which the intercommunication system saves time are numerous. The yardmaster and foremen of the crews that are classifying cars are in conversation frequently to make decisions quickly when setting up another track for a "block." An overall benefit is that the yard work is kept up to date so that the yard receiving tracks are clean to receive incoming road trains. Furthermore, departing road trains are ready at the time called, and tracks are clear for them to pull out without delay. Thus the terminal overtime for road crews has been reduced, and through trains, such as between Cincinnati and New Orleans, get no delays in this yard. Increased efficiency of the yard operation has permitted considerable switching to be transferred from other yards to this yard, thus reducing expenses. By concentrating all outbound cars in this one yard, the trains are made up and depart sooner. The overtime of yard crews has been reduced. Formerly the 29 yard crews totaled 35 to 40 hours overtime daily. Now most of the crews finish their work in 8 hours, and there is not more than a total of 10 hours overtime daily for all the crews.

The intercommunication system is especially helpful when a trainload of bananas arrives. First the banana messengers check the temperatures and icing of every car. Certain cars must be cut out and sent to the icing platform. As a rule the train as a whole is broken up at this yard, some cars going east through Atlanta, and others north through Louisville or Cincinnati. During the checking, icing and classification, the yardmaster uses the communication system to keep the operations coordinated, to the end that the bananas move out of the yard an hour or more sooner than if the system were not in service.

The yardmaster uses the communication system to expedite departing trains. When the locomotive is coupled, the engineman whistles to call for the brake test. When he blows the whistle to acknowledge that the air pressure is up, the yardmaster in his tower hears it. He then uses his communication system to ask the yard clerk if the waybills are ready and to determine whether the conductor is ready to go. If so, the yardmaster passes word to the engineman that all is ready for him to start.

Meanwhile the yardmaster instructs yard crews to clear the leads so the train can pull out with no delay. Here again terminal delay of road trains is reduced.

An Aid to Safety

In one instance a man in the yard noticed that the brakes were sticking on a car in a departing train, and passed this information to the yardmaster over the talk-back speaker. The yardmaster used the paging speakers to broadcast a call to the far end of the yard so that a yardman at that end flagged the train to a stop, and told the engineman what was the matter. The air was bled off the car, and the train was again ready to go. Thus the loud-speaker communication system prevented damage or flat spots on the wheels of the car, as well as delay to the train.

On another occasion a car drifted out of a repair track and across the yard tracks. Word was given to the yardmaster via a talk-back speaker, and he broadcast an emergency call over the paging speakers so that a yardman soon hopped on the car and stopped it. On one occasion a switch engine was derailed on the throat leading into the passenger terminal, so that no trains could pass. As soon as this occurred, the yardmaster was informed by the talk-back speaker and he in turn used the loud-speakers to divert several incoming trains over other tracks to the station. Except for his quick action, and the use of the loud-speakers, at least six passenger trains and several freights would have had to be stopped and held in locations that would have tied up a large part of the terminal facilities in Birmingham for several hours.

Construction of Tower

In order that the yardmaster can have a wide view of the yard, a steel tower 40 ft. high to the floor was erected to support a one-room office, which is 12 ft. square. Large duplex plate glass windows on all four walls extend from the ceiling to a point 1 ft. from the floor. These windows are made up of two plates of glass with dehydrated air between which forms insulation against heat and cold. The windows are fixed, and the room is equipped with an air conditioning unit. A platform and railing extend around the tower to be used when washing the outside of the windows. The ceiling of the room is equipped with Celotex sound absorbing material. This special construction excludes outside noises.

The amplifiers, as well as the yardmaster's console cabinet, including the sets of indicators and keys associated with each line going out to the speakers, were furnished by the Webster Electric Company. The paging speakers were made by the Jensen Radio Manufacturing Company, and the talk-back speakers by the Racon Electric Company. This intercommunication system was planned and installed by forces of the Southern Railway System under the direction of H. A. DeButts, vice-president (operations), the engineering and construction being supervised by J. R. Smith, assistant to the vice-president, communications.

All photographs from the Rio Grande News Bureau

"The Prospector" just west of Moffat tunnel

Diesels Aid the Rio Grande

Important transcontinental freight handled with efficiency and dispatch over the Continental Divide by a fleet of 5,400-hp. freight locomotives

WHEN the present management of the Denver & Rio Grande Western took over the railway on November 1, 1935, its members had no idea, of course, of the role that this railway was to play in World War II. Some idea of what happened on this important transcontinental link after war supplies began moving, particularly to the Pacific, may be obtained from a glance at the revenue statements on a comparative basis. In 1941 the freight revenues of the Rio Grande amounted to $28,418,000. In 1945 the figure was $60,859,000.

During the war also the railway was transformed from a line whose chief source of passenger revenue was from tourists visiting the scenic spots of the West to a most important troop-handling railway. As a result of this and other factors, passenger revenues showed astonishing increases from $1,747,000 in 1941 to $10,777,000 in 1945. These figures, in both cases, represent ticket revenues only and do not include head-end revenues, which showed comparable increases.

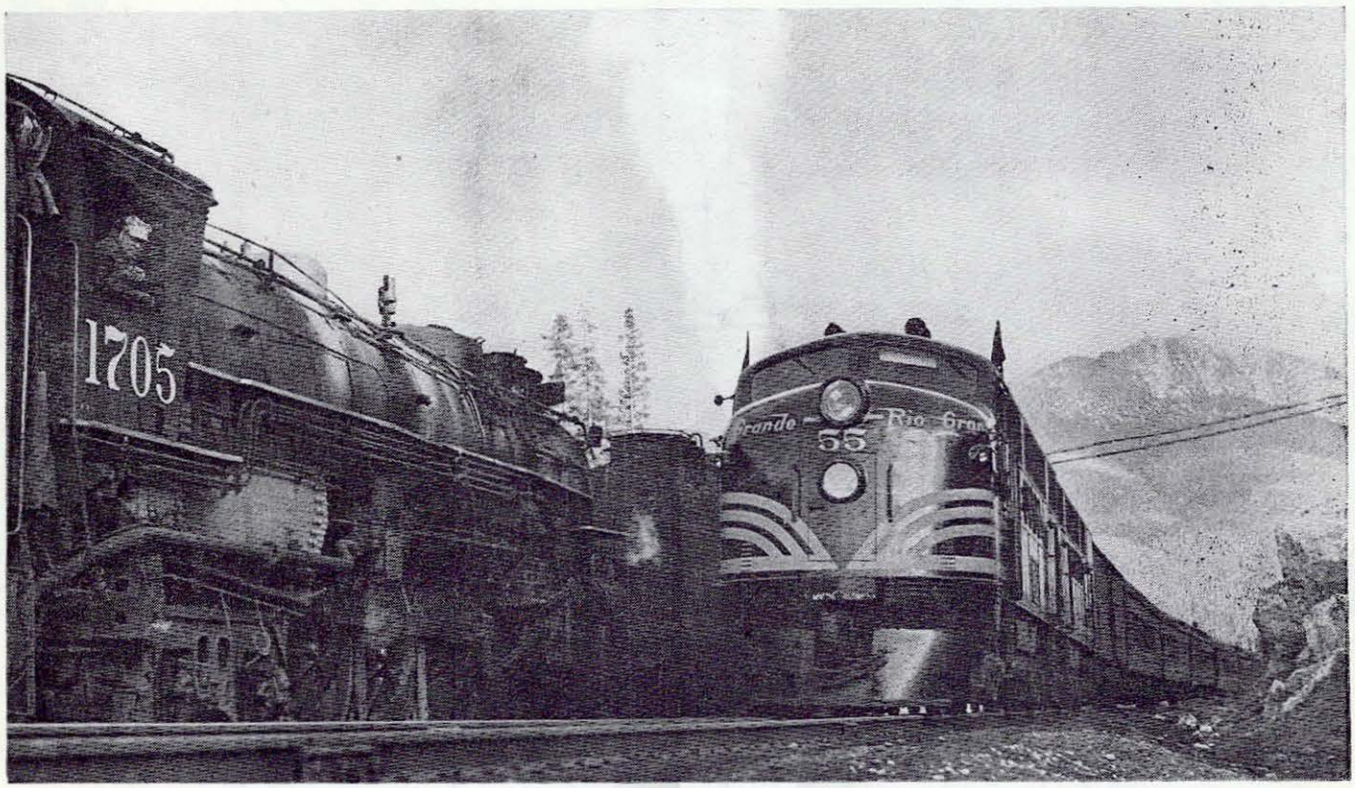
Despite the fact that the management had no idea in 1935 of what was to come in the way of war-time traffic, a very definite program, followed by a consistent plan of improving the railroad, was carried out to prepare the line for handling more traffic. During the six years between 1935 and the beginning of the war, a total of $30,000,000 was expended for additions and betterments. Such improvements included repairing, building, rebuilding or eliminating literally thousands of bridges; the replacing of millions of crossties; the laying of much new rail; the purchase of new rolling stock; and many other items.

Included among the purchases were 20 new heavy duty steam locomotives. But the Rio Grande was one of the first railways to realize the advantages of Diesel-electric power as applied to its operations. Its first Diesels were switching locomotives and a fleet of 35 has since been acquired, ranging in tractive effort from 26,400 lb. to 69,000 lb., and in engine rating from 380 hp. to 1,000 hp.

Orders for three 5,400-hp. Diesel-electric road freight locomotives were placed in 1941, and following their delivery their performance was such as to justify the Rio Grande in placing further orders, with the result that five more were delivered in 1943, four in 1944 and the railway now has three more on order. The fleet of Diesel road locomotives in operation at this time consists of 12 four-unit, 5,400-hp. locomotives with tractive effort ranging from 225,380 lb. to 229,370 lb. The three locomotives now on order are of the new 6,000-hp. type. All of these road locomotives were purchased from the Electro-Motive Division of the General Motors Corporation. In addition, two three-unit 6,000-hp. Alco passenger Diesels are being built for service on the new streamlined "California Zephyr."

The Rio Grande is a mountain railway, but for years improvements have been under way to eliminate curvature and reduce grades. Even so, by the very nature of the terrain traversed through the Colorado Rockies there still remain a number of adverse grades. For example, a 2.2 per cent grade is encountered westbound, beginning in the outskirts of Denver and continuing unbroken to the summit in the center of Moffat tunnel, a distance of some 40 miles. A similar sharp grade, although not as long, is encountered westbound out of Helper, Utah, and crossing the Wasatch range. The sharpest grade on the entire railway is found east from Mintern, Colo., to the summit at Tennessee Pass. This is a 3 per cent grade, 12 miles long.

The most powerful steam locomotives owned by the Rio Grande are 20 of the 2-8-8-2 type, having a tractive effort of



Two and four-unit Diesels are used on D. & R. G. W. passenger trains

131,800 lb. The tonnage rating for these big Mallets on a 2 per cent grade is 1,750 tons, whereas the Diesel-electrics handle 2,100 tons on the same grade. Thus, one of the immediate advantages gained through the use of Diesels was the operation of heavier trains and the elimination in many cases of expensive helper service.

Another immediate advantage was found during the winter of 1942-43 shortly after the first Diesels had been delivered. This was an unusually severe winter and in the high altitude reached by the Rio Grande (over 10,000 ft. at the summit of Tennessee Pass, for example) this meant that the thermometer sank to 50 below zero overnight for weeks at a time. Steam locomotives taking siding froze up in large numbers, and for weeks during the severe weather one of the Diesels was assigned solely to relieving such stalled trains, since the Diesels do not freeze, of course, regardless of the temperature.

Locomotive Assignment

For some years, since the inauguration of long engine runs over two or more divisions, the locomotive assignment on the Rio Grande has been handled from the office of the general superintendent of transportation, rather than from the divisional offices. The steam locomotives are actually assigned to the various divisions. The Diesels are operated on a system basis and are not assigned to any particular division, and their movements are controlled from the office of the general superintendent of transportation also.

When the vastly increased freight traffic was at its height, it was found that the most efficient assignment of the Diesels to procure the greatest locomotive utilization was to dispatch three such locomotives out of Denver each day via the Moffat route. Two of these locomotives would handle their trains through from Denver to Salt Lake City, 570 miles. The third locomotive was cut out at the divisional point of Grand Junction, Colo., 274 miles from Denver, and han-

A four-unit Diesel on the "Flying Ute," a fast merchandise train, in Glenwood canyon

A four-unit Diesel climbing the three per cent grade just west of Tennessee Pass

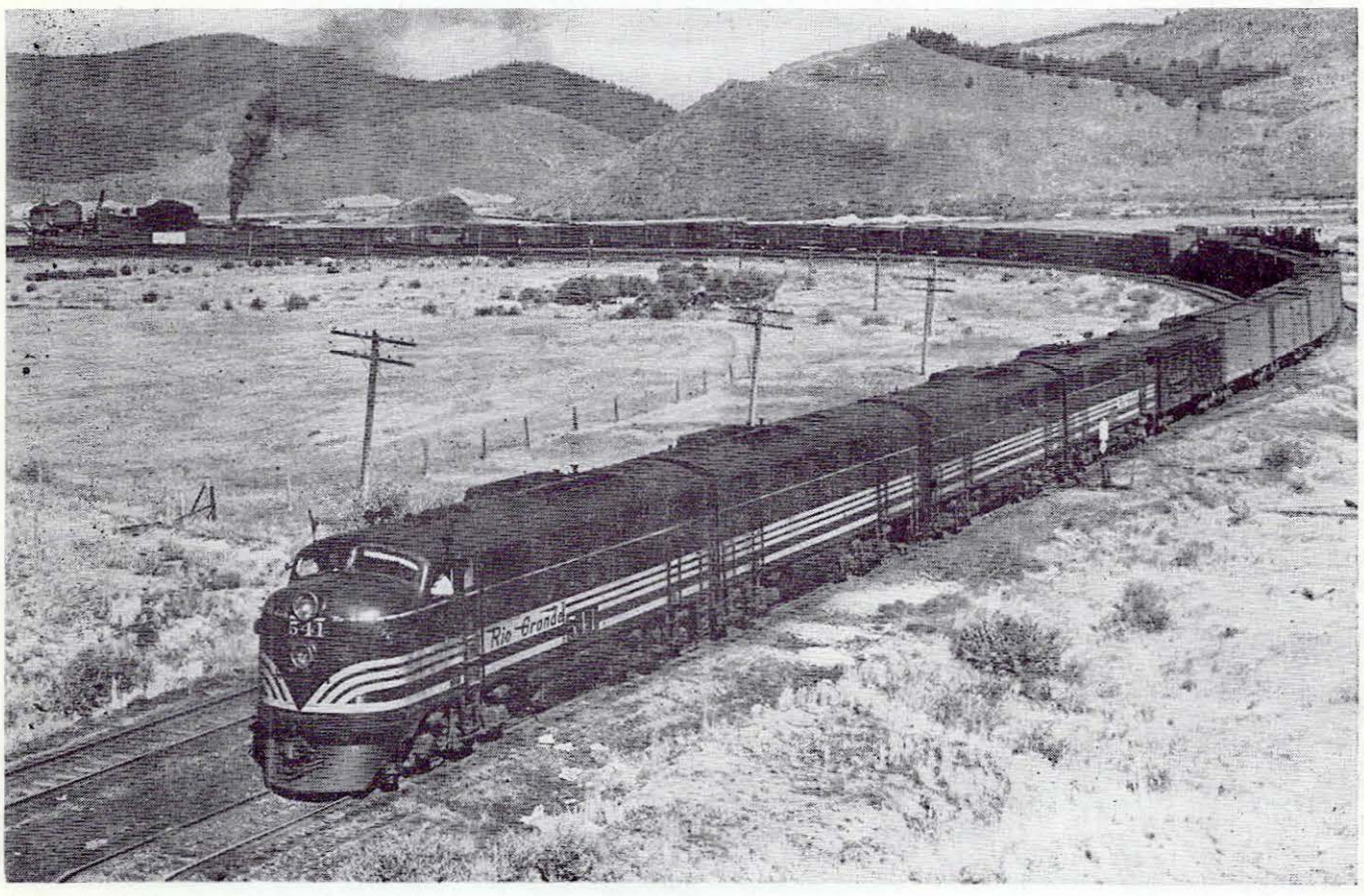
dled an eastbound train from that point to Pueblo, Colo., 330 miles, via the Royal Gorge route. This locomotive then handled a westbound train through from Pueblo to Salt Lake City, 626 miles, and returned from there to Denver. This assignment required 11 of the total fleet of 12 Diesels, one being kept in the shop for inspection and repairs. The Diesels are repaired in a special facility which was constructed at the Burnham shops of the Rio Grande a few miles south of Denver.

Under this plan of operation, the Diesels were available for a large proportion of the total freight train movement on the railway. For example, in 1945 the steam locomotives operated 5,904,636 road freight miles, whereas the relatively small fleet of 12 Diesels operated 1,370,454 road freight miles.

Diesels in Passenger Service

For some years, the "Eagle," a daily train between St. Louis and Denver in connection with the Missouri Pacific, has been operated on the Rio Grande by Diesel passenger locomotive between Pueblo and Denver, 119 miles. The railway also has on order three new Diesel locomotives designed particularly for passenger service. With the reduction in freight traffic which occurred this spring, and spurred by the necessity of reducing steam train mileage because of the coal strike, some of the D. & R. G. W. Diesels have been operating regularly on through passenger trains and have proved successful in restoring the on-time performance of such trains. These Diesels, designed for freight service, have a maximum speed limit of 65 m. p. h. However, because of the curves and grades necessary in this mountain territory, this is not a limiting factor on passenger trains, since there are relatively few places on the Rio Grande where the speed limit is not under 65 m. p. h. On the other hand, the additional power is of great value in ascending the heavy grades without the use of helpers. There are a number of places on the Rio Grande where even the heaviest steam passenger power cannot handle more than a seven-car train without helper assistance. The consist of the "Exposition Flyer," a through Chicago-San Francisco train, exceeds this limit by several cars daily. For this reason, the train is handled over the Rio Grande between Denver and Salt Lake City by four-unit, 5,400-hp. Diesels—one in each direction daily. The "Prospector," a train operated only between Denver and Ogden, Utah, is held to a seven or eight-car limit, and this train is handled daily in each direction by a two-unit Diesel locomotive of 2,700 hp.

Diesels handle increased tonnage on D. & R. G. W. freight trains



Material Purchases Dip in May

Mixed trend reflects the scarcity of some materials, but Class I railroad expenditures for many products manufactured for general maintenance continue high

ALTHOUGH purchases of fuel, materials and supplies (excluding equipment) by Class I railroads during May dipped approximately 12 per cent below purchases for the same month of 1945, and aggregated $115,147,000 compared with $130,119,000 during May, 1945, they were 3 per cent greater than for the same month of 1943, 4 per cent more than 1942 purchases during the comparable month, and more than 20 per cent greater than the $95,463,000 expended for the same purpose during May, 1941, according to estimates prepared by *Railway Age* and based upon individual reports received from 81 carriers.

Expenditures for materials and supplies during the first five months of 1946 amounted to $608,153,000, a drop of approximately 5 per cent compared with the similar period last year; they are 10 per cent less than purchases during the comparable period of 1944; however, they top 1943 by 12 per cent, 1942 by 10 per cent and exceed purchases during the same five months of 1941 by 40 per cent.

Excluding fuel and considering only the purchases of materials and supplies from manufacturers, railway purchases of these items during May aggregated $84,980,000, or 4 per cent more than the $81,481,000 spent for similar materials during the same month of 1945; they are approximately 2 per cent less than May, 1944, purchases in the same category, but top similar purchases during the comparable month of 1943 by 28 per cent, 1942 by 12 per cent, and are fully 21 per cent greater than the $69,919,000 spent for similar material during May, 1941.

Although purchases of manufactured materials and supplies for the first five months of 1946 dipped approximately 3 per cent below those of the same period last year, they amounted to $392,725,000 and exceeded purchases for the same period of pre-war 1941 by 30 per cent. Moreover, they top the $383,658,000 spent for similar materials and supplies during the same five months of 1942 by 2 per cent, are about 24 per cent more than 1943 purchases, but sag almost 6 per cent below purchases in the same category for the comparable period of 1944.

Reflecting the results of the general steel shortage and consequently the sharp reduction in rail production, rail deliveries for May were 7 per cent less than during the same month last year and totaled $4,818,000; they were 22 per cent less than the May, 1944, rail purchases, but are 5 per cent more than the $4,599,000 spent for this purpose during the same month of 1943; however, they are fully 27 per cent less than 1942 and 22 per cent less than the $6,186,000 spent for rail during May, 1941.

During the first five months of this year the railways spent $19,257,000 for rail, or 34 per cent less than the $29,032,000 spent for the same purpose during the same five months of 1945, and 41 per cent, 15 per cent, 17 per cent and 23 per cent less, respectively, than for the first five months of 1944, 1943, 1942 and 1941.

Expenditures for crossties amounted to $7,794,000 during the month of May, a gain of 35 per cent over the January expenditure and 7 per cent more than the $7,306,000 spent for crossties during April; they exceeded the May, 1945, tie purchases by 20 per cent, are 5 per cent greater than the $7,410,000 expended for the same purpose during the same month of 1944, 15 per cent more than 1943, top May, 1942, crosstie purchases by approximately 27 per cent and are fully 80 per cent greater than the $4,321,000 spent during May, 1941.

Crossties purchased during the first five months reflect practically the same trend, totaling $34,907,000 for 1946, and are 21 per cent greater than for the same period of 1945. They are approximately 1 per cent less than the $35,095,000 spent for similar material during the corresponding period of 1944, but are 23 per cent, 24 per cent and 78 per cent greater, respectively, than for the first five months of 1943, 1942 and 1941.

Miscellaneous Materials

Class I roads spent $72,368,000 during May for miscellaneous materials and supplies required for the maintenance of equipment, structures and track, which for the most part comprise storehouse stocks. This total reflects an increase of 4 per cent over the May, 1945, total; however, it is 1.5 per cent less than May, 1944, purchases, but tops the $55,170,000 spent for similar materials during the same month of 1943 by 31 per cent, exceeds 1942 by 15 per cent and is 22 per cent greater than the $59,412,000 expended for similar materials and supplies during May, 1941.

Purchases of miscellaneous materials and supplies for the first five months aggregated $338,561,000, a drop of 2 per cent compared with the $345,327,000 spent for similar material during the same five months last year; they are 3 per cent below 1944 purchases, but are 27 per cent, 2 per cent and 31 per cent greater, respectively, than similar purchases during the comparable period of 1943, 1942 and 1941.

May fuel purchases continued at approximately the same level that prevailed during April and aggregated $30,167,000, a drop of 38 per cent below May, 1945, purchases, and 41 per cent less than the $51,039,000 spent for fuel during the corresponding month of 1944; they sagged 33 per cent below 1943, 13 per cent below 1942 fuel purchases, but top the $25,544,000 expended for similar supplies during the same month of 1941 by 18 per cent.

Fuel purchases for the first five months of 1946 amounted to $215,428,000, a drop of 8 per cent below the comparable period of 1945; they are 16 per cent and 4 per cent less, respectively, than fuel purchases during the same five months of 1944 and 1943; however, they top 1942 by 28 per cent and are fully 64 per cent more than the $131,003,000 spent for fuel during the corresponding period of 1941.

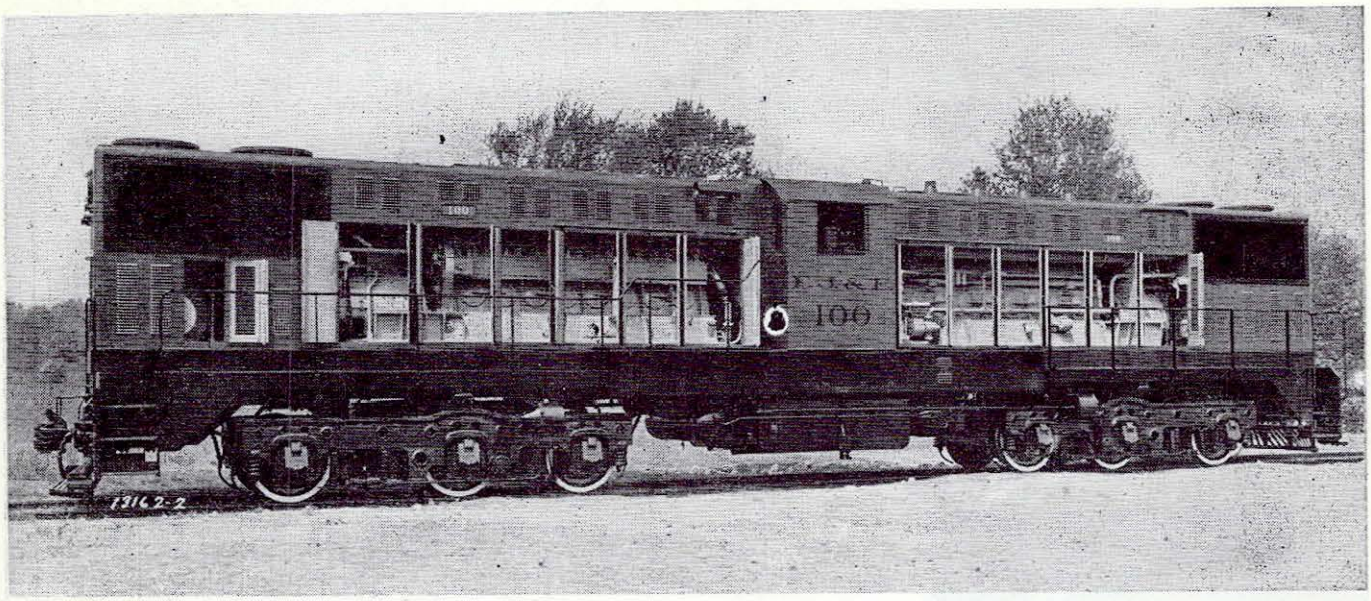
Fuel Stocks Lower

According to *Railway Age* estimates, fuel supplies in stock on May 1 amounted to $43,357,000, a drop of 15 per cent below the May, 1945, balance, 16 per cent less than 1944, and 22 per cent less than May 1, 1943, fuel stock, which totaled $55,627,000.

Rail in stock on May 1, totaled $24,289,000, a drop of 7 per cent below the rail stock on the comparable day of 1945; however, it tops the May 1, 1944, balance by 5 per cent and is 26 per cent greater than the $19,206,000 rail inventory on the corresponding day of 1943.

Crosstie inventories on May 1, 1946, aggregated $77,490,000, an increase of approximately 4 per cent above the 1945 level; however, is about 4 per cent less than the $80,463,000 tie stock on the same day of 1944, but tops the May 1, 1943, crosstie balance by 27 per cent, 1942 by 18 per cent and is 33 per cent greater than the $58,349,000 tie balance on May 1, 1941.

Scrap inventories for May 1 were valued at $11,073,000, 6 per cent greater than on the corresponding day of 1945, 7 per cent, 10 per cent, 9 per cent and 15 per cent more, respectively, than on the comparable day of 1944, 1943, 1942 and 1941.



The Baldwin 2,000-hp. transfer locomotive with inspection doors open

E. J. & E. Receives Transfer Locomotive

Baldwin-Westinghouse locomotives have two four-cycle Diesel engines and a top speed of 60 m.p.h.—Chrome-plated cylinder liners and aluminum alloy pistons used

A 2,000-hp. Diesel-electric transfer locomotive with a maximum safe speed of 60 m. p. h. has been delivered to the Elgin, Joliet & Eastern by the Baldwin Locomotive Works, Philadelphia, Pa. Power is furnished by two Model 608 Baldwin engines of 1,000 b. hp. each. The locomotive has a total weight in working order of 365,000 lb. carried on six pairs of driving wheels. The starting tractive force is 91,250 lb., and the continuous rating at 9.5 m. p. h. is 62,250 lb.

The underframe and pilot are of electrically welded steel-plate construction. The cab is constructed of metal plates, braced and electrically welded, and the entire unit is rigidly secured to the cab underframe. The windows are of the sliding type with shaterproof glass. In addition to the combined automatic and straight air brake equipment a hand-brake connected to one driving truck is located in the cab.

The six-wheel steel truck frames have the side frames, transoms, end frames, gussets and pedestals cast integral, and were furnished by the General Steel Castings Corporation. Standard Steel Works 42-in. diameter multiple-wear wrought-steel wheels and axles of carbon steel, quenched and tempered, are used. Truck equalization consists of a semi-elliptic spring applied to the top of each journal box with the inner ends connected by an equalizer beam, and the outer ends to the truck frame with spring-cushioned links. Engine-truck boxes are cast-steel, friction-bearing type. The bearings are arranged for oil lubrication, and the pedestal liners have grease lubrication.

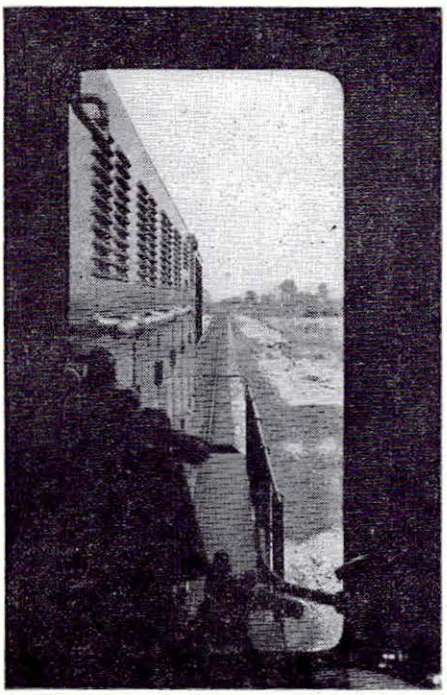
The Diesel Engines

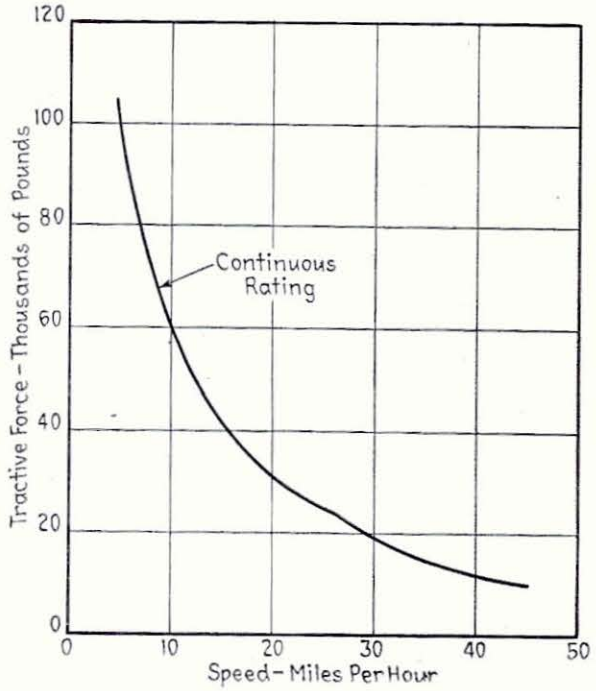
The engines are of the four-stroke cycle type with eight 12¾-in. by 15½-in. cylinders, and develop their rated horsepower at 625 r. p. m. The bedplate is of welded steel with heavy transverse webs. The engine frame is a welded steel structure which forms the cylinder housing and upper part of the crankcase. The cylinder heads are individual castings of annealed high-grade iron with two exhaust and two intake valves. The fuel injector is located in the center of the head, the injection system using spring-loaded, multiple-hole spray nozzles and having an individual fuel pump for each cylinder.

The cylinder liners are of chrome-plated cast iron and fitted with rubber rings at the lower end to permit free expansion and contraction. The pistons are made of heat-treated aluminum alloy and are oil-cooled. They have five compression and three oil-control rings. The connecting rods are drop-forged, heat-treated alloy steel, with interchangeable bearing shells. The crankshaft is a solid forging of heat-treated steel supported on precision-type bearings. The diameter of the crankshaft journals is 8¾ in., that of the crankpins 8⅜ in.

Lubricating oil is circulated by a positive-displacement gear pump, chain-driven from the crankshaft. The oil supply is contained in the bedplate, from which it is drawn by the pump through a suction strainer and delivered to the radiator. After leaving the radiator, the oil flows through a metal-edge full-flow strainer and on to the main bearings. Filtering equipment, operating on the by-pass system, is also installed.

A separate cooling system is used for each engine. Each system has one 500-g. p. m. water pump and one 150-g. p. m. lubricating-oil pump, six lubricating-oil cores and eight water-cooling cores. Two 36-in. diameter aluminum axial-flow fans, each driven by a 40-hp. electric motor, cool the radiators by drawing air through the sides of the radiator compartment and discharging it through





Left—The engineman has good visibility. Right — A diagram of the speed-tractive force relationship

the roof. The fans are controlled by thermostatic temperature regulators located in the water-cooling system and are synchronized with the operation of the side shutters. The side shutters are located in front of the two air inlets and are air-operated by regulators located in the cooling-water system. Each cooling-water expansion tank is located in the roof of the cab.

The camshaft is driven by a roller-type chain. It is made of two sections bolted together. Each section is removable from the operating side of the engine. The hydraulic-relay type governor is gear-driven from the camshaft and is manually controlled from the cab. It maintains the proper engine speed by controlling the quantity of fuel delivered by the injection pumps. The governor oil pressure actuates the load-control valve in correct sequence through the exciter field of the electric transmission system. The overspeed stop is of the centrifugal trip type, gear-driven from the camshaft.

Transmission Equipment

The main generators are Westinghouse type 480-C, d. c., interpole, self-ventilating, and separately excited machines. Each one has a single self-aligning roller bearing and is supported from the engine bedplate with the armature solidly connected to the engine crankshaft. A separate winding is provided for starting the Diesel engine. Westinghouse type YG-40-C auxiliary generator-exciter units are used for exciting the main-generator fields, and to supply power for charging the battery, control circuits, lighting circuits, and the fuel-pump motor. They are belt-driven from the main-generator shaft extension and the auxiliary generator has a voltage regulator for holding the voltage constant at all speeds. The exciter part of the unit is of the differential type. In conjunction with the engine-control load regulator it maintains full engine output over the entire operating range.

The six traction motors are Westinghouse type 370-F, axle-hung, force-ventilated, series-wound motors with single-reduction gearing to the axles. Two motor-driven blowers cool the traction motors, each blower supplying air for three traction motors. The air is carried by metal ducts in the cab underframe, and in separate flexible ducts to the individual motors. Operation of the traction motors from the generators is through electro-pneumatic control. The transmission from full field to shunted field is made automatically at the proper operating condition. The unit switches and reverser in main circuits are electro-pneumatically operated. A relay operates a buzzer warning when wheel slipping occurs, and reduces the power until the wheels stop slipping. After traction is regained, the power is automatically re-applied to coincide with the position of the throttle.

Two control-equipment cabinets containing the control equipment for main and auxiliary circuits are located adjacent to the cab. The 56-cell storage battery is located beneath the walkway flooring and furnishes power for engine starting and control, and for stand-by lighting. It is protected by a reverse-current relay and a charging resistor. Class B insulation is used throughout.

General Dimensions of the Baldwin-Westinghouse 2000-Hp. Locomotive

Gage, ft.-in.	4-8½
Diesel engine:	
Two, eight-cylinder in-line; hp. for traction	2,000
Driving motors:	
Number	6
Type	370-F
Maximum speed, safe, m.p.h.	60
Gear ratio	15:63
Journal bearings:	
Type	Friction
Size, in.	6½ x 12
Wheels:	
Driving, pairs	6
Diameter, in.	42
Wheelbase, ft.-in.:	
Truck	13-0
Total locomotive	51-3
Total weight, lb.:	
In working order	365,000
On drivers	365,000
Light	346,000
Maximum overall dimensions, ft.-in.:	
Width	10-2
Height	15-2
Length (inside knuckles)	70-6
Minimum radius curvature, ft.	400
Tractive force, lb.:	
Starting, at 25 per cent adhesion	91,250
Continuous rating at 9.5 m.p.h.	62,250
Supplies (total capacity), gal.:	
Lubricating oil	270
Fuel oil	1,200
Engine cooling water	600
Sand, cu. ft.	30

ENGINE WHISTLE BECOMES "WORKS HOOTER."—An American locomotive whistle is now serving as a "works hooter" to summon British workers to the job and to signal the end of their working day. The whistle was installed on the "Coronation Scot" as a gift from American railway fans when the famous British locomotive made a 3,000-mile tour of Eastern states and later was exhibited at the New York World's Fair in 1939. When the train returned to its homeland in January, 1942, it was found that the whistle would not clear bridges and tunnels on British lines. It was therefore set up at the London Midland & Scottish Company's Crewe locomotive works where the "Coronation Scot" was built.

Radio In Railroad Tunnels

A newly devised system for transmitting train radio signals through long railroad tunnels has been demonstrated by Bendix Radio Division of Bendix Aviation Corporation in collaboration with the Baltimore & Ohio.

Railroad tunnels have been considered "dead spots" in train radio communications, but the tests on the Baltimore & Ohio show that trains using V. H. F. space radio can carry on satisfactory continuous end-to-end and train-to-wayside communication while the train is passing through long tunnels. The designers state that simple means have been found to overcome tunnel wall absorption of radio energy and a consequent drop of signal strength over appreciable distances.

The tunnel radio installation was made in a half-mile-long tunnel on the Baltimore & Ohio's main east-west freight line at Mt. Airy, Md. For the demonstration, Bendix MRT-1B V. H. F. railroad communication units and associated equipment were installed in a baggage car and a caboose of a local freight train. The train was first backed through the 2,760-ft. tunnel, and then made a return trip on the adjacent track. Continuous communication was maintained between the forward and rear end of the train, and at no time was there a drop in audio signal. Without the new transmission system, radio signals fall below a commercial level at distances of approximately 300 ft. in tunnel operation.

Collector Antennas

In the Mt. Airy demonstration, high-gain rhombic antennas were located atop a hill at both entrances to the tunnel. These collector antennas, which "look" down the tracks, are linked with six strands of copper wire running through the tunnel near the crown. Ten inches below this shielding network, which is three feet wide, is suspended a single insulated wire which carries and re-radiates the radio signal within the tunnel.

Experiments conducted from fixed points outside, revealed that when the transmitter was operated approximately one mile from the tunnel mouth, signal strength within the tunnel compared favorably with free space transmission. The same was true of calls originating within the tunnel to points outside. Readings obtained showed that the transmission line attenuation in the Mt. Airy installation was 15½ decibels, and that there was a 30 db. drop from line to train. This was offset, however, by the 15 db. gain inherent in the rhombic antennas and by the additional gain secured by locating the collector antennas on the hillside approximately 50 feet above the roadbed. The system is designed to give a commercial signal with a drop of up to 141 db. between transmitter and receiver in tunnel communication.

The demonstration at Mt. Airy was conducted at an operating frequency of 158.19 megacycles. Throughout the entire time that the train was approaching and passing through the tunnel, a running conversation was maintained between an operator in the baggage car, immediately behind the steam locomotive and tender, and an operator in the caboose at the rear of the train. Transmissions are kept short so that data on reception could be obtained while the train was completely within the tunnel, and while one end was in and the other out. The position of the train at any particular time had no noticeable effect on signal strength.

The demonstration was witnessed by A. S. Hunt, chief engineer communications and signals, Baltimore & Ohio, and L. J. Prendergast, superintendent of communications, Baltimore & Ohio, under whose supervision the installation at Mt. Airy was made.

* * *

Auto-Loader for Light Cars Designed

An auto-loading device designed especially for the handling of the new light cars now being produced by some automobile manufacturers has been introduced by the Evans Products Company, Detroit, Mich. The new appliance is intended to apply the principles of securing the maximum freight car load possible while at the same time insuring safe transportation of the lading, and is an adaptation of the previous auto-loader used in loading standard automobiles in a railway car. By using the new device ten light automobiles can be loaded in an ordinary 40-ft. freight car, by double-decking the load at each end of the car and loading two additional automobiles on the floor in the center. Without the use of such a device only six such automobiles can be loaded in a 40-ft. car, it is said.

The double decking arrangement used in loading four Crosley automobiles at one end of freight car. Four automobiles are similarly loaded at other end of freight car and two automobiles are loaded in center of car. Loading equipment was developed by loading engineers of Evans Products Co., Detroit

GENERAL NEWS

Federal Agencies Act in Transport "Crisis"

Emergency program announced by Steelman after White House meetings

Diversion of freight from the railroads to inter-coastal and coastwise ships, further efforts to shorten the turn-around time of freight cars, and an undertaking to speed the flow of materials needed for car repairs and construction are among "emergency actions to avert a threatening transportation crisis" which will be taken by eight federal agencies according to an August 27 announcement of John R. Steelman, director of the Office of War Mobilization and Reconversion. "The emergency program," the statement said, "was developed after a series of White House meetings with agency heads revealed that an acute shortage of freight cars has created one of the most serious problems in the reconversion program."

Agencies which will participate in the program are the Office of Defense Transportation; War Shipping Administration; Maritime Commission; National Housing Agency; Civilian Production Administration; Office of Price Administration; Department of Agriculture; and State Department. Dr. Steelman's letter to their heads said:

Seven-Point Program — "The coordinated and effective use of the powers of the government is needed to prevent a transportation crisis during the next few months that would have grave consequences for our domestic reconversion and for our plans to help restore economic and political stabilization abroad. It is requested that the agencies concerned take prompt and vigorous action to meet this problem." The steps to be taken were listed by the O. W. M. R. director as follows:

"1. Wherever feasible, cross-country freight will be diverted from the rails to inter-coastal and coastwise shipping. Fuller use will be made of coastal and inland waterways shipping. Where necessary O. D. T. will establish embargoes and licensing regulations to speed up the diversion of cargoes from rails to ships. W. S. A. and the Maritime Commission will place more ships in coastal and inter-coastal routes.

"2. The Office of Price Administration will promptly review any increased costs incurred by shippers in the diversion to water transport and grant relief where necessary.

"3. The Civilian Production Administration will speed up the flow of scarce materials needed to repair approximately 80,000 old freight cars and build 40,000 new ones this year. Approximately 90 per cent of the steel required for the new cars is already in the shops of the manufacturers or promised for delivery during the remainder of this year.

"4. The State Department will seek prompter placement of foreign orders for freight cars to be built next year. Such a backlog would encourage car manufacturers to speed up production of domestic orders.

"5. Joint action will be taken by O. D. T. and the Department of Agriculture where perishable food crops are threatened by transportation bottlenecks. Shipments of tin cans, sugar and other essential supplies to west coast and mid-western canneries will be speeded up. Action will also be taken to increase the flow of export grain and coal.

"6. O. D. T. will encourage shippers and receivers to further shorten the turn-around time of cars by keeping shipping departments on a six-day week and by using faster unloading methods, and will require railroads to expedite movement of cars, both loaded and empty, while in their hands. O. D. T. will recommend to O. W. M. R. any steps to increase or encourage weekend unloadings that could be taken by other government agencies.

"7. O. D. T. will tighten its regulations governing less-than-car-load freight to force maximum utilization of all freight car space."

Fear Freight Will Back Up—Meanwhile, Dr. Steelman, as the O. W. M. R. statement put it, "praised the strenuous efforts the railroads have made to meet the emergencies of the reconversion period." The statement added that the O. W. M. R. director had "pointed out that with one-third fewer freight cars the railroads are carrying more freight than they carried before the war." Moreover, "about one-third of the cars now in service are more than 26 years old and subject to frequent breakdowns."

Previously, the statement had noted that "the rising volume of industrial production and bumper farm crops have confronted the railroads with heavier loads than they carried at the peak of the war." It also mentioned an O. D. T. warning "that unless extraordinary measures are taken between 50,000 and 75,000 carloads of freight would back up weekly this fall." Colonel J. Monroe Johnson, director of O. D. T., has told Dr. Steelman that by mid-October the railroads will face a demand for 1,000,000 car loadings weekly.

"About 925,000 unloadings weekly," the O. W. M. R. statement added, "is the best the railroads can do, Colonel Johnson said. During the first two weeks of August car loadings averaged 32,000 cars a week heavier than the corresponding weeks of Aug-

(*Continued on page 382*)

Sen. Taylor Assails Budget Bureau Delay

Says Webb's agency is slow recommending government suit against carriers

Renewing his attack on the alleged war-time practices of the nation's railroads, Senator Glen H. Taylor, Idaho Democrat, this week declared that he was "shocked" by the "extreme solicitude" with which James E. Webb, director of the Bureau of the Budget, is dealing with the railroads "in spite of the convincing proof that 'extensive reparations'" are in order.

Senator Taylor's remarks, made public August 26, were contained in an August 22 reply to a letter written on August 20 by Director Webb in response to an August 1 letter from Senator Taylor in which the latter, as reported in *Railway Age*, August 10, page 236, expressed the hope that the Budget Bureau director would "shortly advise" the attorney general to undertake litigation against the railroads in order to recover "overcharges" paid by the government as a result of "excessive war-time freight rates."

As further noted in the same issue of *Railway Age*, Senator Taylor also asserted that "the 'rate committee' of the Army Transportation Corps was composed largely of officials of the carriers, who, for the duration . . . wore the uniform of the Army and Navy to negotiate rates with their former and future employers." The allegations were denied by the Association of American Railroads.

In addition to his denouncement of Director Webb, Senator Taylor, who on August 2 asked Senator Mead, New York Democrat, chairman of the Senate war investigating committee, to conduct a congressional probe into the railroads' war-time transactions, also disclosed this week that he was requesting the so-called Mead committee to "broaden the scope of its activity in order to discover what railroad men, if any, are responsible for the policies of the Budget Bureau with respect to railroad freight rates."

Important Considerations — In his August 20 reply to Senator Taylor's letter of August 1, Director Webb contended that "it seemed necessary to explore fully all the relevant factors" before proceeding further with litigation against the railroads.

"We have . . . discussed with the Bureau of the Internal Revenue the question of tax adjustments that would result from large reparation awards to the government, in order to estimate the net percentage re-

(*Continued on page 381*)

Roadmasters-B.&B. Convention Program

September 17-19 meetings in Chicago to hear varied papers and reports

The achievements of maintenance of way men in the recent war will be the subject of an address by Major General Carl R. Gray, Jr., head of the United States Military Railway Service during the war, and now vice-president of the Chicago & North Western, before a joint session of the concurrent conventions of the Roadmasters and Maintenance of Way Association and the American Railway Bridge & Building Association, at the Stevens Hotel in Chicago, September 17-19. General Gray will be heard at the afternoon session on September 17.

On the morning of September 18, L. G. Bentley, general safety agent of the Chesapeake & Ohio, will describe that line's safety activities which culminated in its receiving the National Safety Council 1945 Award. The afternoon session on that day will be featured by an address by Donald D. Conn, executive vice-president, Transportation Association of America, on "Problems Ahead in Railway Transportation," and one by W. K. Wallace, chief civil engineer, London, Midland & Scottish, London, England, on "Reconversion and Recovery Problems on the English Railways." Wednesday evening the members of the two associations and their families will be the guests of the Track Supply Association and the Bridge and Building Supply Men's Association at their joint annual banquet.

Highlights of the Roadmaster's convention will include committee reports on the following subjects: Inspection of Rail by Track Forces; Tie Failures and Measures to Overcome Them; Track Maintenance Problems in C. T. C. Territory; Programming Work to Obtain Maximum Use of Power Equipment; Minimizing the Need for Slow Orders; and Selection and Maintenance of Ballast.

F. R. Layng, chief engineer of the Bessemer & Lake Erie, will address the group on Tuesday afternoon on "reducing Maintenance of Way Costs," and will be followed by G. M. Magee, research engineer, Engineering division, Association of American Railroads, who will speak on "What Size and Design of Tie Plates?". The session on Wednesday morning will feature a talk on the "Why and How of Ballast Cleaning," by H. W. Protzeller, consulting engineer, Chicago, while at the afternoon meeting, T. A. Blair, assistant chief engineer of the Atchison, Topeka & Santa Fe, will report on "Developments in Roadbed Grouting." The final speaker at the convention will be T. H. Beebe, chief draftsman of the Chicago & North Western, who, at the morning session on September 19, will describe that road's installation of 27 units of special trackwork at a crossing of the C. & N. W. and the Chicago, Milwaukee, St. Paul & Pacific in Chicago. Following Mr. Beebe's talk and a short business session, the group will make an on-the-ground inspection of the crossing.

June Conventions at Atlantic City

For the first time in a decade the Mechanical division, A. A. R., and the Purchases & Stores division, A. A. R., will hold their annual conventions in Atlantic City, N. J., next year, during the week beginning June 23. The meetings will be held in Convention Hall which will also house the exhibit of the Railway Supply Manufacturers' Association. While the convention sessions will be concluded on Friday, the exhibit will remain open at least part of Saturday.

The Bridge and Building Association will receive reports of the Committees on: Adapting Turntables to Meet Modern Conditions; Methods of Cleaning Water Lines, Sewers and Drains; Developments in the Use of Off-Track Work Equipment; Methods of Improving Strength, Durability and Wear Resistance of Concrete; Tools and Equipment for Bridge and Building Shops; Cause and Prevention of Personal Injuries to Bridge and Building Employees; Utility and Economy of Pre-Fabricated Buildings; and Servicing Facilities for Diesel Locomotives.

An address entitled "Federal Interest and Responsibility in Railway Sanitation" by H. N. Old, sanitary engineer director in charge of Land and Air Carrier Section, Sanitary Engineering Division, United States Public Health Service, Washington, D. C., will feature the morning session on September 19. At the afternoon session on that day, J. C. Sherrick, partner, Holabird & Root, architects, Chicago, will address the association on "Modern Architecture and Materials in Railway Building Construction." Immediately following, H. I. Benjamin, vice-chairman of the System Commission on Insurance, Southern Pacific, San Francisco, will talk on "Preventing Bridge, Building and Tunnel Fires."

The closing feature of the convention will be an inspection of the Diesel-electric maintenance and repair shops of the Chicago, Burlington & Quincy at Clyde (Chicago), Ill. This trip will be made on the afternoon of September 19.

Associations Complete Plans for Chicago Exhibit

The Track Supply Association and the Bridge and Building Supply Men's Association have completed plans for the joint exhibit of materials and equipment representing 88 companies, which is to be featured at the concurrent conventions of the Roadmasters' and Maintenance of Way Association and the American Railway Bridge and Building Association, to be held on September 17-19 at the Stevens Hotel, Chicago.

Supplementing the list of 83 exhibitors listed in *Railway Age* of August 10 are the following:

Gradall Division, Warner & Swasey Company.
Modern Railroads.
Railroad Equipment.
Railroad Products Company.
Woodings Forge & Tool Company.

Propose Coordination of British Transport

In an attempt to avert nationalization of services, old grievances put aside

In November, 1945, the British Labor government announced its intention of introducing, during the present Parliament, measures designed to bring about public ownership and control of all transport services in Britain. At a party conference held in June, 1946, at Bournemouth, Emanuel Shinwell, minister of fuel and power, reiterated the intention of the government to nationalize the transport industry and further stated: "If the railways are to pay their way, they cannot be divorced from road transport. That it will be embodied in legislation and become an actual fact is beyond doubt."

Realizing that in all probability a bill for the nationalization of the railways and long-distance road transport will soon be introduced in Parliament, the boards of the four British main-line railway companies took the first of two steps to oppose, and if they can to avert, ultimate nationalization. That step was a poll of the views of their stockholders.

A letter to every railway stockholder explained their boards' conviction of the advantages of retaining the railways under their present ownership and management. An excerpt from the railway chairmen's letter follows: "The many tributes which have been paid to the efficiency with which the railways have met the needs of the community under both peace and war-time conditions make it obvious that the present railway administration has built up an organization which can deal efficiently with the problems of the future and there is no evidence that nationalisation will give better service to the community. A fundamental change of this character, in the opinion of your board, will have a disturbing effect on trade and industry throughout the country and on the economic life of the community in general."

Enclosed with each letter were extracts from speeches of each of the chairmen at the last annual meetings of the companies, dealing with nationalization, and one or the other of two leaflets prepared by the London & North Eastern's Stockholders Association and the British Railway Stockholders Union, noting certain financial matters which would be an outgrowth of nationalization and emphasizing complications and restrictions likely to be encountered under nationalization. Attached to the letter from the railway chairmen was a postcard on which the stockholder was asked to indicate whether or not he favored the boards' taking all possible steps to oppose any nationalization proposals affecting the railroads.

The Railway Gazette, British cousin to *Railway Age*, in its July 5 issue reports the British daily press as saying response of the stockholders to the poll was great. On a facing page, however, appears comment, probably not unique in its tenor, from a Gazette correspondent as to reception of

the poll: "Nothing was said about the terms which the present proprietors might expect to secure in the event of the state taking the lines over. Neither was any indication given of the policy which the railway companies would propose to pursue if they were set free from government control. [For the past six and one-half years of war-time and reconversion the government has virtually controlled British railways.]

"In the absence of guidance on these all-important points, it is difficult to see how any great value can attach to the result of the poll. One suspects that the average stockholder will be influenced in casting his vote either by political convictions or by preconceived ideas of the financial effect of a change-over from private to public ownership. He would have been in a better position to come to a reasoned decision if the chairmen had outlined constructive proposals for reorganizing the main-line undertakings, as an alternative to state ownership and control. Unless the companies are ready with a comprehensive scheme of their own, they cannot hope to oppose the government's plans effectively."

As if in answer to those who criticized the railways for failing to offer an alternative to socialization came, on July 16, a memorandum to the minister of transport. Prepared jointly by the general managers of the four main-line railway companies and representatives of the Road Haulage Association, this Step No. 2 in the railways' campaign proposed coordination of all road and rail freight transport.

No spur-of-the-moment plan this, for its foundations date back as far as 1939. However, times have changed since November, 1938, when the British railroads, then convinced of the futility of trying to reach any agreement with the road transport groups, came out emphatically with their "Square Deal" proposals and demanded the removal of all statutory restrictions on their freedom to charge what they thought fit for the transporting of merchandise.

By April, 1939, after the Transport Advisory Committee reported favorably for road-rail coordination based on this same "Square Deal," some order began to come out of the long rivalry and bickering between the railroads and the truckers, and the basis for the present agreement began to take root. A Road-Rail Conference was formed then, and, despite being retarded to a degree by the war, progress was made on such matters as classification of freight, conditions of transportation and correlation of charges and rates, although British commercial truckers have not been subjected to such close government regulation as American truckers.

At that time the principal difficulty in working out a compatible arrangement lay in the absence of any one body able to speak with authority on behalf of the truckers generally. With the formation last year of the British Road Haulage Federation, more rapid progress became possible. In May, 1945, discussion began between the general managers of the railroads and the representatives of the Road Haulage Association, formed from an amalgamation of the six principal road associations. As a result agreement has been reached on certain principles and proposals which, the parties concerned believe, best approach the solution of the road-rail relationship—a problem which must be solved regardless of whether the railroads remain under private ownership and management or are taken over by the government.

The basic principle of the proposal is that the public should have an unqualified right to pick the type of transportation most economical and convenient for its needs—including the right of shippers to carry their own goods in their own vehicles. To make this possible all road and rail services must be so organized that the shipper is provided as far as is practicable with adequate alternative facilities and competition on fair terms. This, in turn, will require the truckers to accept responsibilities similar to those of the railroads for providing reasonable services and for accepting traffic which they hold themselves out to carry without discrimination between shippers (representing a gain for the railroads who have long resented the road haulers' picking and choosing of choice loads). Truckers also would become responsible for conforming to standard conditions of transporting, classification of merchandise, and national rate structures correlated between the different forms of transportation so as to encourage shippers to make the best possible use of the transportation available.

It is recognized that the application of these principles will be a lengthy process and will require both new and amending legislation. The present carriers' licensing system, set up under the Road & Rail Traffic Act of 1933, must be amended to make it a statutory obligation for a carrier to carry or arrange the carriage of goods in the districts and between the places mentioned in his license. To achieve this end, it is suggested that area organizations of truckers be formed to provide for the transporting of such goods by road as cannot be handled expeditiously by individual haulers. All commercial truckers and the railway companies would then be required to register with their appropriate area organization and accept an obligation to carry any traffic necessary to enable the road haulage industry to fulfill its obligations. These area bodies would be managed and operated by the truckers' organizations. It is proposed that observance of rates and conditions of transport for road as well as rail should be a statutory requirement.

Dealing with the carriers' obligation to accept traffic, the memorandum suggests that all future applicants for licenses must not merely state their intention to carry certain goods between certain districts or places, but must accept an obligation to do so.

The Railways Act of 1921 will require amendment to enable railways to adopt a merchandise rate structure correlated with the highway carriers' rate structure. It is not yet clear how this will affect the standard revenue clauses of the act.

It is further suggested that a Road-Rail Tribunal, along the lines of the present Railway Rates Tribunal, be established to settle such matters as standard conditions of transport, classification of merchandise and correlated road and rail rate schedules. It is felt that any representative body of users or carriers should be entitled to be heard when such matters are being considered, and that any user or carrier should be entitled to apply for the adjustment of a scheduled charge on the ground that it is not reasonable. The dangers of monopoly would be avoided by giving shippers freedom to select the form of transportation which best suits them or allowing them to carry their own goods in their own vehicles.

It is recognized that the truckers cannot properly carry out the functions of a public service unless rates and conditions of carriage are established on an economic basis. Therefore, it is proposed that they accept the same obligation as the railways of non-discrimination in charges as between users of transport. This will necessitate the truckers formulating and adopting a national rate structure and the adoption by the railways of a rate structure for merchandise by both freight and passenger services capable of correlation with the road rate structure. It is explained that this does not mean the adoption of equal rates for rail and road, although they may be identical in some cases.

Further proposals of the memorandum concern the mutual arrangement of agreed or contract charges for road and rail traffic; and the "rationalization" of railway collection and delivery services with those of other road services on a cooperative basis, possibly by the formation of new area organizations. Voluntary arrangements might possibly be made for the provision of railway freight cars for the sole use of the highway carriers on selected routes to provide express services for long-distance traffic. It has also been suggested that a central transport advisory body should be formed to report directly to the Ministry of Transport on all matters concerning the development and the coordination of transport.

The memorandum points out that the solution of the road-rail problem is but one step towards the coordination of all forms of inland transportation services. The British inland waterway carriers and the coastwise shipping industry are said to support the proposals warmly and desire to enter into similar agreements. Even more important possibly is the news that the proposals have been welcomed by such organizations as the Federation of British Industries, the Association of British Chambers of Commerce and the Traders' Coordinating Committee.

The next move is expected to come from the Ministry of Transport, and the British railways and truck agencies await that verdict. The plan seems workable to those concerned, and hope has been expressed that it may end the threat of nationalization of transportation.

Food for Armed Forces Exempt from O. D. T. Loading Order

Certain carload shipments of meat and other perishable foodstuffs for the armed forces have been excepted by the Office of Defense Transportation from the minimum-loading requirements of General Order ODT 18A Revised. The exceptions were made in General Order ODT 18A, Revised-18, which became effective August 22.

With respect to meat, they apply to export shipments as follows: When packed

in boxes and consigned by or to any branch of the armed forces; and when the quantity loaded in a packer type refrigerator car is not less than 40,000 lb. if the inside length of the car is 36 ft., and not less than 45,000 lb. if the inside length is 40 ft.; or when the quantity loaded in an RS type refrigerator car is not less than 45,000 lb. Shipments of perishable foodstuffs for the armed forces are excepted until October 21 when consigned for consumption at any point in this country.

The O. D. T. statement with respect to the foregoing also announced revocation, effective August 26, of General Permit O. D. T. 1-2, which had excepted merchandise freight cars carrying shipments for the armed forces from the requirements of the l. c. l. minimum-loading order—General Order ODT 1, Revised.

Canadian National Employees Get 10 Cents an Hour More

Unions representing most of the employees of the Canadian National and affiliated companies in Canada, including the Ontario Northland, have entered into an agreement with the management for a wage increase of 10 cents per hour, Labor Minister Humphrey Mitchell has announced in Parliament. This increase is effective as of June 1, except that maintenance of way employees, who received a two cents per hour increase in April, will receive eight cents additional effective June 1. Discussions of changes in working rules are deferred to February, 1947.

The agreement affects some 115,000 employees, according to Mr. Mitchell. Negotiations had not been completed with the Brotherhood of Railroad Trainmen at the time the statement was made, but it was said that the government expected an agreement covering its membership to be reached soon.

Small Urges All Industry to Expedite Unloadings

Civilian Production Administrator John D. Small this week called upon the nation's industrialists and their operating personnel to help in meeting the shortage of freight cars by expediting their unloading schedules.

In a letter addressed to the operating heads of companies whose receipts of shipments, according to the C. P. A., are believed to total about 80 per cent of all car loadings, Mr. Small urged that cars arriving on Fridays and Saturdays be unloaded "as soon as possible." He also asked the cooperation of workers to see that cars were kept in service as much as possible, pointing out that a freight car standing idle on a siding waiting to be unloaded was not only a total loss to the railroad but also to the consignee and other shippers who might be using it.

Mr. Small said that despite the fact "the railroads were doing their best," replacements for worn rolling stock were slow in production. He added that the country's only hope for improvement at the present time was through more efficient use of the present stock.

"During the first seven months of this year, 21,568 new freight cars were put into service against a maximum estimated need of more than three times that number," he observed. "Approximately 150,000 freight cars are unloaded each business day at present. If even half that number are allowed to stand untouched and motionless during the two-day weekends the resulting slow-up in over-all freight movements is easily apparent to anyone."

C. of C. Asks Shippers to Aid During Car Shortage

The Chamber of Commerce of the United States this week urged railroads and shippers to comply with 20 suggestions recently recommended by the Car Service Division of the Association of American Railroads in an effort to help alleviate the transportation situation which has arisen from the shortages of freight cars.

"Our great transportation industry . . . is now staggering under heavy demands from peacetime American industry," the C. of C. declared. "Increasing freight car shortages are reported in all localities and no relief is in sight except what can be provided through efforts of shippers and carriers to get the utmost efficiency in use of available equipment."

Rail Operational Safety Hearing Set for October 2

The Interstate Commerce Commission has set a hearing at the Hotel Gibson, Cincinnati, Ohio, on October 2, to receive evidence showing what, if any, additional appliances, methods or systems to promote safety in railroad operations should be required to be installed by roads on which trains are operated at a speed of 50 m.p.h. or more, and what, if any, uniform definitions of the terms "medium speed" and "low (restricted) speed" should be prescribed. Commissioner Patterson will preside.

The hearing notice explained that should an order of application be entered following the hearing, any respondent, upon request made within 60 days of the entry, will be given a further hearing to show that it should be excepted from the order or that the order should be modified with respect to the particular road.

Budweiser Teams Up with the Streamliners

Anheuser-Busch, Inc., has brought to Broadway and 43rd street, New York, a mammoth illuminated sign which not only extolls the qualities of Budweiser beer but is geared to give constant publicity to some 36 railroads during the next 36 months.

Action of the sign involves a streamlined train racing across the desert. At the same time, the "spectacular," a name denoting background and action in advertising parlance, depicts Grand Canyon from sunrise to sunset and then in the shadow of moonlight, through the ingenious use of light and third dimension, with the advertising message flashing on at regular intervals. The entire action cycle takes approximately five minutes.

The idea behind the use of the train in the "spectacular" is that each month an exact replica of one of America's famous trains will be used. Since the display was bought on a three-year basis, 36 railroads will be represented during the lifetime of the sign.

The first to be reproduced is one of the Santa Fe's streamliners, constructed from blueprints of the actual train in 40-gage iron. The train is said to be one-third actual size with an engine cab large enough to seat a man.

The sign itself is of five-plane, three-dimensional construction, 75 ft. by 100 ft. overall, and weighs 600 tons. It contains 2,500 ft. of fluorescent tubing and 7,500 lamps.

More Time for Returns in Ship-Competitive Rate Case

The Interstate Commerce Commission has set back from September 9 to October 9 the date by which the railroads are required to file statements showing cause why the commission should not vacate or modify outstanding fourth-section orders in some 60 proceedings wherein relief from the long-and-short-haul clause has been granted in connection with the maintenance of water-competitive rates. The deadline date for filing replies to the railroad returns has likewise been changed from September 23 to October 23.

The reopening of the fourth-section cases is part of the commission's response to the pending request of the United States Maritime Commission and War Shipping Administration for an investigation of all railroad rates competitive with those of domestic water carriers (see *Railway Age* of August 3, page 200).

Great Northern Gives Facts in Box Car Shortage

Lack of sufficient materials to build several hundred new box cars, and to repair a large amount of war-worn equipment, and the fact that a large percentage of its box cars are off line, were given by the Great Northern in a newspaper advertisement directed to its customers as reasons for its inability to resume pre-war "on the spot" service to grain shippers, and to transport promptly lumber and other products of the Northwest.

Prior to the war, the Great Northern said, it established a reservoir of serviceable cars at strategic points in advance of the harvest season, assuring swift, efficient movement of grain to markets. Although the road now owns 24,632 box cars, as of August 21 less than 15,000 box cars, or about 60 per cent of its ownership, were on its own rails. Of these box cars, only 5,640 were owned by Great Northern. While the road needs all of its box cars in daily home-line service, the advertisement emphasized that it actually has on its line 10,000 fewer cars than it owns.

The Great Northern attributed this condition to the universal box car shortage, to the fact that it is an originating line with more loaded cars moving from it than to it, and to the necessity of repairing a large percentage of cars now on its lines. Other major factors contributing to the shortage, the advertisement continued, are: Increase in L. C. L. traffic, with its necessarily light loads; shorter average hauls

of other types of freight, creating a longer average turn-around time; the 5-day week in industry, which stops unloading of cars from Friday night to Monday, although railway operations are on a 7-day basis.

Concluding, the advertisement explains that the road's management believes that a lasting improvement will begin only when individual roads and car-building concerns are able to obtain adequate materials to build the thousands of new box cars now on order.

Representation of Employees

As the result of a recent election which has been certified by the National Mediation Board, the Brotherhood of Railroad Trainmen, by virtue of a victory over the Railroad Yardmasters of America, retained its right to represent yardmasters employed by the Union of Memphis, Tenn.

The Brotherhood of Railroad Shopcrafts of America also retained its right to represent carmen and sheet metal and electrical workers, including their helpers and apprentices, employed by the Pennsylvania-Reading Seashore Lines. The B. of R. S. of A. defeated by a 55 to 40 vote the Brotherhood of Railway Carmen of America, the Sheet Metal Workers International Association and the International Brotherhood of Electrical Workers, each operating through the Railway Employees' Department, American Federation of Labor.

In another election involving the representation of yardmasters and assistant yardmasters employed by the Norfolk & Western, in which the R. Y. of A. polled more votes than the B. of R. T., the board ruled that it could not certify the result because "less than a majority of those eligible to vote actually voted." These employees were represented by the B. of R. T. at the time the election was held.

D. & R. G. W. Buys Utah Trackage

Important new industrial trackage through the Salt Lake Valley has been acquired by the Denver & Rio Grande Western at public bidding for properties of the defunct Salt Lake & Utah.

According to Rio Grande officers, the purchases, among which are a number of sites for new industries as well as trackage, are particularly important because of present and potential industrial development in the area. Included in the transaction was trackage in West Jordan, Utah, Spanish Fork, Springville, Orem to Grundy and Salt Lake City.

Lewis' Union Defers L. I. Strike

A threatened strike of employees of the Long Island represented by District 50 of the United Mine Workers, called for August 23, was postponed at the last minute last week, reportedly upon instructions from the union's Washington, D. C., headquarters, following a White House announcement that an "emergency board" would be named to investigate the "facts" in the dispute.

The union's compliance with Railway Labor Act procedures in this way was a reversal of its previously announced policy to go through with the strike without regard to any government action unless the railroad accepted the terms offered it. As reported in *Railway Age* of August 24, page 349, the union's demands included some 100 changes in working rules as well as wage increases. It was pointed out that the expressed determination of District 50 leaders not to accept the wage increase and one-year delay in the discussion of rule changes to which the railroad brotherhoods agreed put them in the position of claiming to be able to obtain more for the employees than the established brotherhoods.

Operation of the Long Island has been proceeding without incident, pending consideration of the case by the Presidential board.

The names of the emergency board members had not been made public when this issue of *Railway Age* went to press.

Railroads' Ex Lake Coal Price Put Up by O. P. A.

The Office of Price Administration has authorized an increase of five cents per ton on bituminous coal sold to the railroads when the fuel is sold "ex-dock" at the Great Lakes, which is not covered by the general increases in coal prices. The O. P. A. also permitted an increase of six cents per net ton and seven cents per gross ton on bituminous coal sold for direct use as bunker fuel on the lakes.

New Fort Eustis Commander

The Army Transportation Corps has announced that Colonel George C. Stewart has succeeded Colonel John W. Mott as commanding officer of the Transportation Center at Ft. Eustis, Va. Colonel Mott has been assigned to the New York Port of Embarkation. Colonel Stewart, a native of Alabama and a graduate of the United States Military Academy, was Chief of Transportation, Mediterranean Theater, with temporary rank of Brigadier General. He served as Deputy Chief of Transportation in the European Theater, and in the Western Pacific as Chief of Transportation.

Lake Michigan Car Ferries Again in Operation

Operation of railroad car ferries on Lake Michigan and in the St. Clair river at Detroit was resumed on August 25 and 26 following an agreement between the striking members of the National Maritime Union (C. I. O.) and the four railroads affected. According to an N. M. U. announcement, the strike settlement resulted from an agreement by the railways that there would be no discrimination against the strikers and that the pre-strike rights of the striking employees would remain unaffected.

Settlement of the strike was expected to pave the way for a discussion of the status of the car ferry workers who appear to be covered both by the Railway Labor Act, as railway employees, and by Great Lakes marine regulations, as seamen on the lakes. According to P. D. Harvey, a representative of the National Mediation Board, the railways have agreed to open talks in 30 days on the question of a 40-hr. week and other concessions for these workers.

The Wabash ferries at Detroit resumed operation at 3 p.m., August 25, and were followed shortly by those of the Pere Marquette. On Lake Michigan both the P. M. and the Grand Trunk Western reported their ferries in normal operation by August 26, while those of the Ann Arbor returned to service at noon of that day.

Freight Car Loadings

Loadings of revenue freight for the week ended August 24 totaled 884,957 cars, the Association of American Railroads announced on August 29. This was a decrease of 2,613 cars, or 0.3 per cent, below the preceding week, an increase of 31,531 cars, or 3.7 per cent, above the corresponding week last year, and a decrease of 19,914 cars, or 2.2 per cent, below the comparable 1944 week.

Loadings of revenue freight for the week ended August 17 totaled 887,570 cars, and the summary for that week as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loading

For the Week Ended Saturday, August 17

District	1946	1945	1944
Eastern	168,225	114,292	157,808
Allegheny	190,029	131,675	192,940
Pocahontas	66,368	32,581	55,715
Southern	128,486	94,968	121,485
Northwestern	134,910	110,953	141,551
Central Western	135,586	110,735	140,213
Southwestern	63,756	57,628	76,911
Total Western Districts	334,232	279,316	358,675
Total All Roads	887,570	652,832	886,623
Commodities:			
Grain and grain products	50,310	53,897	49,915
Livestock	15,704	14,184	16,436
Coal	181,006	90,003	172,810
Coke	13,635	11,547	14,214
Forest products	51,612	37,416	50,202
Ore	73,701	62,917	79,695
Merchandise l.c.l.	119,897	90,516	106,524
Miscellaneous	381,705	292,352	396,829
August 17	887,570	652,832	886,623
August 10	899,084	870,002	895,181
August 3	898,395	863,910	889,594
July 27	910,513	886,430	909,496
July 20	921,496	882,648	902,092
Cumulative total, 35 weeks	25,108,012	27,044,574	27,416,429

In Canada.—Car loadings for the week ended August 17 totaled 70,841 cars as compared with 66,847 cars for the previous week and 60,670 cars for the corresponding week last year according to the compilation of the Dominion Bureau of Statistics.

Totals for Canada:	Revenue Cars Loaded	Total Cars Rec'd from Connections
August 17, 1946	70,841	34,740
August 18, 1945	60,670	31,772
Cumulative Totals for Canada:		
August 17, 1946	2,209,977	1,119,354
August 18, 1945	2,253,005	1,200,424

Inter-Industry Committee on Cathodic Protection

Representatives of the Association of American Railroads, the American Gas Association, the American Petroleum Institute, the American Water Works Association, the American Telephone & Telegraph Co., the Western Union Telegraph Company and the National Association of Corrosion Engineers met in St. Louis, Mo., on August 19-21, to discuss the formation of an inter-industry committee to improve procedures for handling problems arising from

cathodic protection of pipe lines, communications cables, railroad signal systems and other buried structures. The American Transit Association was also represented at the meeting by an observer. H. H. Anderson, vice-president of Shell Pipe Line Corporation, Houston, Tex., was elected chairman of the group.

Working under the title Correlating Committee on Cathodic Protection, the group proposed to recommend to its principals the permanent formation of the committee to undertake a program of research and assistance, to be accomplished through the publication of general and technical bulletins. Suggested bulletin titles are: General Information of Cathodic Protection; Notification Procedure; Cathodic Protection Practices; and Joint Cathodic Protection Installations. The group also recommended that a geographical listing of all operators of buried structures be published in such a form as to assist any operator intending to install cathodic protection in notifying operators of crossed or adjacent structures that may be affected.

Railroad representatives attending the meeting were J. M. Trissel, superintendent communications and electrical engineer, Illinois Central, Chicago, and A. E. Archambault, assistant engineer, New York Central, New York, both representing the Electrical section of the Engineering division of the A. A. R.; and G. P. Neal, superintendent of signals and telegraph of the Chicago & Eastern Illinois, Danville, Ill., and R. B. Amsden, special engineer—signal department, I. C., Chicago, both representing the Signal section.

Plans Early Investigation of Railroad Reorganizaations

An early start of an inquiry by a Senate interstate commerce subcommittee empowered to investigate the handling of insolvent railroads was indicated last week by Senator Francis J. Meyers, Pennsylvania Democrat, subcommittee chairman. Senator Meyers said that President Truman's pocket-veto on August 13 of the so-called Wheeler-Reed bill, S. 1253, as reported in *Railway Age*, August 17, page 305, made the subcommittee investigation "more important than ever," adding that he hoped the committee would be able to convene for the investigation during the current congressional recess.

"However," Senator Meyers commented, "I want to get the views of the other members of the subcommittee and also find out whether we can arrange an early meeting to discuss the situation and perhaps set a time for a hearing." Other subcommittee members, none of whom will be engaged in personal political campaigns this fall, include Senators Stewart of Tennessee, Johnston of South Carolina, Hawkes of New Jersey and Capehart of Indiana. The latter two are the Republican members of the subcommittee.

According to a statement by Senator Meyers, the inquiry, authorized by Senate Resolution 192, "would be for the purpose of searching 'into the causes for the long drawn out period of insolvency handling' of many railroads in trusteeship or receivership, and of investigating fees paid trustees, receivers, counsel, bankers and other groups." The statement also noted that "the long-range purpose of the investigation is to recommend such changes in existing law as 'may be found desirable to bring railroads now insolvent back into solvent operation and to avoid those long periods of trustee and receiver handling for the future'."

The statement said that "President Truman touched on what he termed 'excessive' levels of fees and expenses in railroad reorganization cases" in disapproving S. 1253, which provided machinery for certain roads in receivership to be returned to their stockholders.

Car Service Orders

Revised Service Order No. 534 was made effective on August 28 by the Interstate Commerce Commission to extend to all freight cars, except refrigerator and tank cars, the authority of its agent (Warren C. Kendall, chairman of the Car Service Division) to control the distribution of empty cars. Previously, Mr. Kendall's authority under the order extended only to empty box cars. The expiration date of the revised order is December 20.

Amendment No. 2 to Service Order No. 558 became effective August 23, the expiration date of the original order, which has authorized substitution of refrigerator cars for box cars to transport fruit and vegetable containers and other packing materials from the Pacific Northwest into California. The amendment postpones the expiration date of the order until September 23 and at the same time restricts originating territory to points in California and in Oregon on or south of a line from Lakeview through Klamath Falls to Ashland. It also allows substitution of any RS type refrigerator car regardless of suitability for fruit and vegetable loading and whether equipped with floor racks or not.

Expiration dates of several other orders have also been advanced, the orders, extending amendments, and new expiration dates being as follows:

No. 82 which requires railroads to make joint use of terminals within the Louisville (Ky.) switching district. Amendment No. 2—February 23, 1947.

No. 180 (fourth revised) which provides for super-demurrage charges on refrigerator cars. Amendment No. 6—February 28, 1947.

No. 394 which restricts the free time on refrigerator cars. Amendment No. 8—February 25, 1947.

No. 396 which requires reconsignment of refrigerator cars within 48 hours from 7 a.m. after arrival at diversion point. Amendment No. 3—February 25, 1947.

No. 436 which requires railroads to pull empty refrigerator cars within 24 hours after unloading and to forward promptly to loading territory. Amendment No. 3—February 23, 1947.

Col. Johnson Still Pushing Car Program; R. F. C. Hesitates

Colonel J. Monroe Johnson, director of the Office of Defense Transportation, is still pressing for adoption of his recent proposal for government financing of the construction of 50,000 box cars for lease to the railroads. The O. D. T. director said this week that he still hopes to put over the program, although he conceded that the Reconstruction Finance Corporation has not yet been sold on it.

As previously reported, Colonel Johnson's idea has been that the cars might be purchased by the R. F. C. and parceled out by lease to various roads, the lessees obligating themselves to purchase the cars before buying any other equipment of the same type. He stated that the railroads are disposed to cooperate, noting that some roads have been writing in asking that some of the cars be allocated to them. In fact the O. D. T. director said that present objections to the program are "solely" those of the R. F. C., which he still hopes to convince.

It is understood that discussions with the R. F. C. have not yet reached such specific matters as terms of the proposed financing and interest rates, the lending agency having first raised general questions as to whether the program might be in competition with private banking. In that connection, Colonel Johnson is represented as having no objection to private financing; he prefers it to avoid "red tape," if it could be arranged without the usual requirement for a 25 per cent cash payment on the equipment. He has previously pointed out that 25 per cent of the cost of 50,000 cars is "a lot of money" and he is not disposed to reprove the railroads for reluctance to get it up while their earnings outlook remains uncertain. Moreover, if the financing were done by the R. F. C., the O. D. T. director would expect the rental arrangements with the railroads to reflect an interest charge in line with the low rates the railroads have been obtaining on equipment trust certificates. He sees no possibility that the government would lose money on the transaction.

Colonel Johnson also feels that placement of the proposed government order for 50,000 cars would have the effect of speeding up production in the builders' shops. Such a backlog, he believes, would remove any fears which the builders may now have that top-speed operations on present orders would result in working their plants out of a job at an early date. The O. D. T. director was not critical of such an attitude on the part of builders; he pointed out how difficult it is in these times to rebuild a labor force after it has been dispersed by a plant shutdown.

Suburban Services Subjected to Study by Rock Island

A comprehensive study of its Chicago suburban train operations, including consideration of new air-conditioned, Diesel-powered trains, is being undertaken by the Chicago, Rock Island & Pacific, Aaron Colnon, co-trusteee of the road, said in an interview August 26. Mr. Colnon said that the Rock Island, about a year ago, had requested the Pullman-Standard Car Manufacturing Company to submit plans for an 8-car train for use in suburban service between Chicago and Joliet, Ill., and recently had invited other car builders also to submit designs.

Such a train, if built, he said, would be air-conditioned, have the most comfortable seats available and provide for more legroom than existing suburban cars, and center doors, in addition to those at the ends of the car, to speed loading and unloading. Mr. Colnon favored Diesel-electric locomotives for the train because of their flexibility and the absence of smoke and cinders.

"I see no reason for the heavy cumbersome cars now being used in Chicago's

suburban service," Mr. Colnon said. "The hot, dirty, and dusty cars generally found on the suburban trains drive business from the railroads. I am not eliminating my own road from the group though our cars are second best among the standard roads.

"What the railroads should offer the public are cars that are light in weight, cool in summer, and warm in winter, with really comfortable seats. The object of the roads should be to transport the city's working men and women so that they will feel relaxed when they arrive at offices and stores. And in the evening, commuters, tired after the day's work, should be transported home in restful, clean, and comfortable cars.

"I believe that the railroads are standing in their own light with the kind of service they are offering. If they would provide the kind of service the public would really like I believe that the roads would find it profitable. With really good service, few of the public would drive their automobiles to and from their work in the Loop. I believe that with frequent fast service all during the day and evening we would find a really good volume."

Wallace Wants "Non-Scheduled" Air Carriers Unregulated

Secretary of Commerce Wallace has called upon the Civil Aeronautics Board to set aside its "extremely restrictive" definition of "non-scheduled" air carriers and restore the "open-door" policy with respect to such operations. The call came in a statement which the secretary filed in the board's Docket No. 1501 investigation of the non-scheduled services.

As noted in the *Railway Age* of June 15, page 1198, the board's recent report on that investigation declared that non-scheduled service has "a far more restricted meaning than the mere absence of a published time-table"; and it went on to say that irregularity of service necessary for exemption from full regulation "is that which does not, either directly or indirectly, lead the public to believe that between given points a reasonably certain number of flights per day or per week, or flights at approximately certain times or on certain days, may be anticipated with a reasonable degree of assurance."

The report also called attention to decisions which the board issued about the same time in cases involving the operations of Page Airways, Inc. (Docket No. 1896), and Trans-Marine Airlines, Inc. (Docket No. 1967). It found those operations in violation of the Civil Aeronautics Act and ordered the companies to cease and desist from such violations. Along with its opinion in Docket No. 1501, the board issued for comment from interested parties its proposed "economic regulations" for non-scheduled operations, and it had previously imposed safety requirements on such carriers.

While Secretary Wallace conceded that the board's report in the investigation proceeding leaves unchanged its original exemption order applicable to non-scheduled operations, he added that "practically, however, the effect of the board's new definition and interpretation of non-scheduled service, taken together with the proposed new regulation and the concurrent decisions in the investigations of Page Airways and Trans-Marine Airlines, is to so narrow the meaning of the term 'non-scheduled' as to exclude from the exemption order . . . most of the several hundred air carriers now operating under that order."

Meanwhile, the secretary had asserted that the Department of Commerce favors "no one type of air carrier as against another," its "sole objectives" being to assure "the full development of adequate, efficient and non-discriminatory transportation services and to work toward the removal of any public or private policies which would retard or hinder such development or which constitute bottlenecks to progress toward these ends." Previously, the secretary had called the non-scheduled operators "unsubsidized air carriers who seek to supply the public with a variety of common carrier services supplemental to those provided by certificated scheduled air carriers." In addition to his call for a restoration of the "open door" policy, Mr. Wallace made three other specific recommendations to C. A. B. as follows:

> That no restrictive economic regulation be imposed at this time upon common carriers by air offering services other than fully scheduled services supported in part by mail payments, and at least until such time as adequate factual information is available to the board and the parties regarding the nature and scope of such operations, their actual effect, if any, upon the level of air-mail payments to scheduled air carriers, the relative economy of non-scheduled services and their ability to satisfy the changing needs of commerce, whether unjust rate and service discriminations adversely affecting the public exist, and what might be the most economical size firm in these newer branches of air transportation.
>
> That . . . the board should reopen its proceeding, Docket No. 1501, and set additional hearings to bring the record up-to-date and to permit all parties, including the many non-scheduled carriers whose operations were established since the hearings were held, to present the facts concerning non-scheduled business opportunities, existing and future needs for non-scheduled services, the advantages and disadvantages of unhampered competition, the present extent and characteristics of non-scheduled services, and other factors bearing upon the wisdom of imposing economic regulation.
>
> That a recurrent reporting system for non-scheduled carriers be established as soon as practicable, to the end that adequate and current factual data regarding their operations may be continuously available.

Johnson Asks for Quick Repair of Bad Order Freight Cars

Colonel J. Monroe Johnson, director of the Office of Defense Transportation, this week urged the chief executives of the nation's railroads to redouble their efforts to repair and reduce the number of bad order freight cars. Colonel Johnson's plea was issued August 28, the day following Reconversion Director John R. Steelman's announcement of a seven-point program designed to alleviate the freight car shortage, noted elsewhere in this issue.

Colonel Johnson's appeal was contained in letters addressed to the railroad officers, in which he recalled previous pleas to the industry to repair bad order cars. The letter cited figures showing the number of freight cars awaiting repair on the respective roads and particularly stressed the number of bad order box and hopper cars.

"Box car and hopper car shortages . . . are the most serious factors in the present acute situation," he wrote. The bad order car figures, he declared, "while reasonably good for normal times cannot be justified in a period when the national car supply would be inadequate even if every car were in service."

The O. D. T. director pointed out that during the war the national percentage of cars awaiting repair was kept below three per cent, despite the manpower shortage and other difficulties. In asking the railroads to reduce their number of bad order cars, he said they should set the same three per cent level as their immediate objective.

"Your railroad and every other railroad which is immobilizing an abnormal amount of equipment needed for service must feel that the national interest in this critical reconversion phase can only be served by an active and earnest effort to keep every car possible under load."

Colonel Johnson also called for "definite assurances" as to the extent to which the present car repair situation can be bettered in the near future. He offered the aid of the O. D. T. in expediting deliveries of steel and lumber which, he said, may be delaying car repair programs and asked for information on any material bottlenecks which the carriers might have.

According to the O. D. T., the number of cars of all types awaiting repair as of August 3 totaled 82,088, or 4.7 per cent, as compared to the November 1, 1942, wartime low point figure of 41,608, or 2.4 per cent. It was pointed out that the 40,000 increase in the number of bad order cars since the war-time low point is about twice the freight car shortage of 20,615 reported for the week ended August 3.

Pre-Hearing Conference Slated on P. & D. Service

A pre-hearing conference in the No. 29555 and No. MC-C-542 proceedings, pertaining to pick-up and delivery service by railroads and motor carriers, respectively, has been scheduled for September 16 at the Washington, D. C., offices of the Interstate Commerce Commission. Commissioner Rogers will preside.

It is contemplated that the conferees will discuss (1) evidence to be offered by the respondents and other parties; (2) the times and places for the hearings and (3) other such matters as may aid the I. C. C. in arriving at an early decision.

C. P. A. Authorizes O. D. T. to Recommend Draft Deferments

The Civilian Production Administration has delegated to the Office of Defense Transportation the authority to certify a number of workers in the transportation industry for consideration for deferment by local draft boards under the Selective Service System. According to the O. D. T., the C. P. A., under the recently amended Selective Service Local Board Memorandum No. 115, was named as certifying authority for both production and transportation workers in order to keep the number of certifying agencies at a minimum.

An O. D. T. statement said that the delegation of authority to it was made at the request of the Office of War Mobilization and Reconversion "in view of the special problems in transportation" and

"the experience of O. D. T. in handling deferment matters for workers in the transportation crisis." Certifications by the O. D. T. to Selective Service headquarters will indicate that certification is being made by the O. D. T. as an agent of the C. P. A., the statement said. Certifications will be limited and will be made in accordance with the standards set forth in the amended memorandum.

The O. D. T. also named six "receiving agencies" to handle the receipt and checking of Selective Service Form 42A Special Revised to be used by the transportation industry in making applications for employee deferments. The agencies, which will handle the detailed work connected with the filing of forms and screening for correctness of information are as follows:

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The O. D. T. said that when the Forms 42ASR have been checked by the receiving agencies, the O. D. T. Division of Manpower and Materials will pass upon the applications for deferment as the agent of the C. P. A. Those certified by the O. D. T. will be sent directly to Selective Service national headquarters for transmittal to the appropriate local board. Copies of a memorandum of instructions to employers in the transportation industry, including the standards of certification for transportation workers, may be obtained from the O. D. T. Division of Manpower and Materials, Washington, D. C.

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"When your business is good, ours is also; when yours declines, we feel the effect immediately. We must be ever alert to take what comes and to adjust ourselves to the vicissitudes of business, be the trend upward or down. Just as you have had short and varying supplies of merchandise, so have we been afflicted with shortages of our own, although they are in different form—ours are express cars, motor trucks and experienced personnel. . . .

"After V-E Day, when its war-time traffic took an immediate drop, Railway Express took no vigorous steps to develop new business to replace it. Instead, we devoted our energies to bringing about a definite service improvement, that we might prepare for better days to come. But when we tabulated our business for the year 1945, we found we had handled 209,181,380 shipments, a new record for the 17-year period during which the Express Agency has served as the major express company. If we had expected any marked recession of our traffic in 1946, we were obviously mistaken. Post-war reconversion was under way and it immediately took up the slack. Without much relief from our pressing war-time shortages, our business volume during the first four months of this year showed further increases of between 25 and 40 per cent over same months in 1945, varying in different regions of the country. . . .

"Some of this excessive volume undoubtedly comes to us because other transportation mediums are even more seriously affected and are not functioning as they formerly did. In time, those now using express as a stop-gap in their normal distribution functions probably will return to slower transportation mediums, which will help us in our endeavors to serve well our regular customers. No one of us can escape from the consequences of labor unrest, work stoppages and shortages of goods and equipment. The transportation industry, the very life-blood of the nation—as recent events have clearly shown—is the first to suffer from such handicaps.

"Looking to the future—I believe we are making real progress and I bespeak your further consideration and cooperation as we proceed. The sun is beginning to shine; and we are beginning although only just beginning to round the turn in the transportation situation. The outlook is now far more promising from a service standpoint. The railroads are gradually having their long-standing orders for new equipment filled. This will make available more suitable cars for the movement of express business and the eventual elimination of box cars for that purpose. We are from time to time receiving a few more of the hundreds of new trucks that have long been on order. . . .

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But one by one the gears start to mesh, production gets under way despite current handicaps and soon we shall see the nation's shelves start to fill up and the day arrive when we can walk into our favorite store and buy a white shirt and think nothing of it or a suit of clothes or a pound of butter or a steak—and we will have good train service and good express service. And we will all be hustling for business—and that will be good for all of us.

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Noise Concerns Air Enthusiasts

Public reaction to next-door airports is proving a stumbling block in the grandiose plan to provide the nation with hundreds of "close-in" airports as an inducement for more persons to buy and fly planes, according to T. P. Wright, federal administrator of civil aeronautics. He explained that both suburban and city residents have flooded his offices with complaints that airplane noise is "waking the baby", "breaking up conversation in our home", "making a night's sleep impossible", and "rattling the dishes in the cupboard."

In Malvern, Pa., citizens brought suit in-

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Noting that weekly carloadings since mid-July "have equalled wartime peak levels," C. P. A. warned that it expects to see even more goods shipped during the third and fourth quarters of 1946, and for an indefinite period thereafter. "The railroads," the statement continued, "estimate that they are short 100,000 freight cars. July production of just under 4,000 cars was down almost 25 per cent from April output, principally because of insufficient supplies of steel. Earlier, C. P. A. had hoped for a rate of 8,000 cars a month by July. Car builders at the end of July had 53,000 cars on order for domestic users and 43,000 on order for export."

Mr. Small summed up this way: "The demand for freight car capacity reflects a healthy condition of high production in important areas of the economy, such as coal, steel, lumber, building materials, grain, and livestock. But until we get more cars into service or more use out of the cars we now have, the country's potential rate of output will be held down because of sluggish circulation of basic products and materials."

Noise Concerns Air Enthusiasts

Public reaction to next-door airports is proving a stumbling block in the grandiose plan to provide the nation with hundreds of "close-in" airports as an inducement for more persons to buy and fly planes, according to T. P. Wright, federal administrator of civil aeronautics. He explained that both suburban and city residents have flooded his offices with complaints that airplane noise is "waking the baby", "breaking up conversation in our home", "making a night's sleep impossible", and "rattling the dishes in the cupboard."

In Malvern, Pa., citizens brought suit in-

tended to get a court decision terming the airport a public nuisance. In this instance, the Civil Aeronautics Administration's Technical Development Division is measuring the noise made by the planes at the Malvern airport and comparing it with the noise made by cars, trucks and other ground vehicles.

In recommending that the National Advisory Committee on Aeronautics give consideration to research directed at airplane noise reduction, Mr. Wright urged that such an investigation be directed initially toward small aircraft in view of what was termed bitter public opposition facing communities planning airports for the use of private planes. The committee has advised him that a research project to investigate the propagation of noise from light airplanes has been initiated.

In an invitation to the Aircraft Industries Association, Mr. Wright said: "It is becoming apparent that the noise attendant to the operation of aircraft is threatening to undermine the progress already made and to retard the further advancement of civil aviation. In support of this statement, witness the many complaints recently received by the Civil Aeronautics Administration, and the increasing opposition to location of airports adjacent to populated areas."

Mr. Wright emphasized the growing public irritation with the noise in his letter to the Air Transport Association of America, and suggested that the airlines "give careful consideration to noise reductions in the specifications set down for new equipment."

He also demanded that airline pilots "strictly observe all existing rules regarding altitudes when approaching and leaving airports," and suggested that they "give every consideration practicable to the reduction of noise nuisances to persons on the ground."

Research into the noise problem has already indicated ways of making airplanes quieter, according to the C. A. A. Among the suggested noice remedies for propellers are the use of either a larger propeller or one with three or four blades, the use of multiple propellers, and the cowling of the entire propeller. Several light planes now use mufflers to quiet noise. A Bureau of Standards test has also found that a considerable reduction in engine noise could be obtained merely by the use of an exhaust manifold.

Sun Valley Resort to Re-open

Sun Valley, Idaho, sports resort of the Union Pacific, which during the war served as a rehabilitation and recreational center for naval personnel, will begin its first post-war winter season on December 21.

A list of current publications appears on page 391.

Materials and Prices

The following is a digest of orders, notices and information that have been issued by the Office of Price Administration and the Civilian Production Authority, since July 29, and which are of interest to railways:

Building Materials—To prevent diversion to other uses of building materials bought for use in the veterans' housing program, C. P. A. has restricted their resale in an amendment to priorities regulation No. 13.

Copper, Lead and Zinc—Reconversion Director Steelman has made payments under the recently extended premium price plan for copper, lead and zinc retroactive to June 30, and directs that retroactive wage and salary increases by mine operators be considered in the payment of premiums for copper and lead.

Pig Iron—To prevent an unfair dislocation of the supply of merchant pig iron in certain sections, C. P. A. has directed reduction of up to 25 per cent of August purchase authorizations for merchant pig iron in the South, the Pittsburgh and Buffalo areas and eastern Pennsylvania, under Direction 13 to iron and steel Order M-21.

Plaster—Priorities assistance for builders to obtain hardwall plaster for use in emergency housing has been provided in amended Schedule A of C. P. A. Priorities Regulation 33.

Steel—Canadian applicants for priority assistance to obtain steel used in housing products and farm machinery must now apply to C. P. A. for such aid, and priorities aid to obtain pig iron is extended to Canadian manufacturers of farm equipment and housing products, in amendment to Direction 12 of steel preference Order M-21.

Steel Sheets—Increased amounts of steel sheets must be made available to the container industry to assure adequate deliveries of many reconversion materials, the steel shipping containers industry advisory committee tells C. P. A. C. P. A. says any effort to extend priorities aid would dislocate present distribution of steel sheets, without relieving the present shortage.

Steel—Outlook for a sustained high rate of steel production appears sufficiently bright to allow re-establishment of priority aid for steel to manufacturers in breaking production bottlenecks, C. P. A. and industry representatives have agreed.

Surplus—Urgency certificates will no longer be issued or renewed for surplus items listed in the war assets veterans' setaside list but all outstanding certificates will remain valid until their expiration date, C. P. A. ruled in an amendment to Direction 16 to priorities, Regulation 13.

Tin Mills—The tin mill products order channeling 85 per cent of these materials into cans and closures for perishable foods, pharmaceuticals and other so-called A cans should not be continued in its present form, the industry has advised C. P. A. However, there is disagreement to whether Direction 9 to M-21 should be revoked Sept. 30, or retained in modified form for the fourth quarter.

Prices

The following is a digest of orders, notices and information that have been issued by the Office of Price Administration, since August 19 and which are of interest to railways:

Alloy Steel Products—Warehouse resellers of alloy steel products, screen wire cloth, nails, brads, staples and bale tie wire may add to their maximum prices the amount of increases recently granted to producers, under Amendment 41 to Revised Price Schedule 49, effective Aug. 19.

Armored Cable — Resellers of armored cable have been granted a percentage pass-on of two general increases granted manufacturers of armored cable on May 8 and June 14, averaging 27 per cent, O. P. A. has announced in Amendment 15 to MPR 82, effective Aug. 23.

Automotive Parts—Increases in manufacturers' ceiling prices for all automotive parts over their base date freeze price have been announced by O. P. A. in Amendment 15 to MPR 452, R 453, both effective Aug. 24.

Batteries—Resellers of industrial electrical storage batteries have been given a percentage pass-on of the increases in their net invoiced costs in Amendment 2 to Order 641 under revised O. P. A. Regulation 136, effective Aug. 19.

Bearings — Increases in manufacturers' maximum prices for antifriction bearings and metal balls used in them have been authorized in O. P. A. Order 664 under revised Regulation 136, effective July 27.

Beehive Oven Coke—Maximum prices for beehive oven coke produced in the Connellsville district of Pennsylvania have been increased $1.35 per net ton for hand-drawn coke and $1.25 per net ton for machine-drawn coke, O. P. A. announced in Amendment 6 to MPR 77, effective Aug. 22.

Brass Mill Products — Distributors' maximum prices for brass mill products have been raised 3.04 per cent to comply with the percentage markup requirement of the price control extension act of 1946, O. P. A. announced in Amendment 3 to MPR 408, effective Aug. 23.

Building Brick—Increases in ceiling prices for common and unglazed face clay building brick produced in the Hudson River area of New York, reflecting adjustments for approved wage increases, have been announced by O. P. A. in amendment 59 to Order 1 under Section 25 of MPR 92, effective Aug. 19.

Building Materials—O. P. A. has raised the ceilings of several categories of building materials to conform with the provisions of the price control extension act of 1946 regarding resellers' markups. Amendment 21 to Supplementary Regulation 14F of General MPR; Amendment 96 to Order A-1 under MPR 188; Amendment 11 Revised Price Schedule 45; Amendment 24 Revised MPR 206; Amendment 19 MPR 224; Amendment 7 MPR 466; and Amendment 60 to Order 1 under MPR 592 are all effective Aug. 24.

Cast Iron Enamel Plumbing Fixtures—A 10 per cent increase over the existing ceilings (March, 1942, prices) for cast iron enameled plumbing fixtures has been announced by O. P. A. in Amendment 26 under Order 48 under Section 22 of MPR 591, effective Aug. 21.

Cast Iron Soil Pipe—An increase of $1.75 a ton for cast iron soil pipe and fittings has been authorized by O. P. A. in Amendment 7 to Revised Price Schedule 100, effective Aug. 13.

Chemicals—O. P. A. has announced decontrol of cyanides of alkalies and heavy metals and mixtures containing more than 25 per cent of these chemicals, except silver cyanides (compounds included are sodium, potassium, copper, lead and zinc cyanide), beeswax compositions containing 50 per cent or more beeswax, cleaning fluids based on sodium alkyl benzene sulfonate and packaged for household use, dispersion of colloidal graphite in any vehicle, potato dextrine and products containing 25 per cent or more potato dextrine or potato starch, under Amendment 43 to Supplementary Order 129, effective Aug. 22.

Coal—Coal dealers' ceiling prices for all solid fuels have been increased to meet requirements of the new price control act, O. P. A. has announced. Producer or distributor ceilings f.o.b. the mine are not changed. Amendment 48 to Revised MPR 122 is effective Aug. 22; Amendment 35 to MPR 189 and Amendment 39 to MPR 121 are both effective Aug. 23.

Construction Machinery—Sellers of construction machinery and equipment, who have been selling under interim price ceilings 10 per cent above base prices in effect Oct. 1, 1941, may continue to sell at these price levels indefinitely under O. P. A. in Amendment 46 to revised Regulation 136, effective July 27.

Contracts—Although the price control extension act became law shortly after 4 p.m. July 25, O. P. A. is not treating transactions which occurred at any time in that day as violations.

Copper—Premiums for copper resellers have been raised ¼ cent a lb. in each quantity sales bracket, effective Aug. 23, O. P. A. has announced in Amendment 8 to Revised Price Schedule 15.

Cotton Insulation—Ceilings on flame proof cotton insulation have been raised an average of 8 per cent by O. P. A. in Amendment 2 to Regulation 544 effective July 27.

Electric Motors—Increases in the ceiling prices of electric motors, effective May 13, may not be applied to carbon, graphite and metal graphite brushes and contacts, O. P. A. has announced in Amendment No. 2 to Order No. 624 under Revised MPR 136, effective Aug. 28.

Electrical Coils and Windings—Manufacturers

of copper electrical coils and windings have been granted price increases to reflect advances in copper prices on June 5, O. P. A. has announced in Amendment 52, to revised MPR 136, effective Aug. 23.

Electrical Outlet Covers—Maximum prices for boxes and covers for electrical outlets and switches have been raised 19 per cent at the manufacturers level in Order 669 under revised O. P. A. Regulation 136 effective Aug. 17.

Exemption Formula—Qualifications and procedures for exemption from price control under the "new commodity" provision of the Price Control Extension Act of 1946, have been announced by O. P. A. in Supplementary Order 173, effective Aug. 19.

Hand Tools—A simplified method of pricing retail sales of hand-cutting tools, heavy forged and mining tools, mechanical hand-service tools, farm and garden tools, trowels, shovels, spades and scoops, resulting in higher ceilings has been provided in O. P. A. regulation 614, effective Aug. 9.

Hand Tools—O. P. A. issued a single order for manufacturers of hand tools, incorporating price adjustment provisions previously provided in four separate orders, and adding price increase factors for manufacturers of garden tools and masons' tools. Order 5105 under Section 1499, 159B of Regulation 188 is effective Aug. 1.

Hardwood—Sellers of northern and northeastern hardwood lumbers in retail type direct mill sales may use the higher of two applicable ceiling prices, under Amendment 16 to O. P. A. Regulation 223, and Amendment 10 to Regulation 368, both effective Aug. 17.

Lead Products—Resellers of lead products may raise their maximum prices enough to restore their March 31 percentage markups on these products as required by the price control extension act of 1946, O. P. A. has announced. Amendment 15 to Supplementary Regulation 14G is effective Aug. 23.

Linseed Oil—An increase of 1.3 cents a lb. in ceiling prices of raw linseed oil and various linseed oil products has been authorized by O. P. A. in Amendment 65 to Regulation 53, effective July 31.

Log-Run Southern Pine Lumber—Small mills have been given an option of selling their product of southern pine lumber on a log-run basis or on a graded basis, O. P. A. has announced in Amendment No. 2 to Revised MPR 19A, effective Aug. 26.

Lumber—An average increase of $4.75 a thousand feet for Sitka spruce lumber has been authorized to encourage production in revised O. P. A. regulation, effective Aug. 14.

Lumber—O. P. A. has removed certain restrictions on the use of wholesalers markup over mill prices on direct-mill sales by or through direct-mill distributors in nine softwood lumber regulations and two hardwood flooring regulations in revised Supplementary Order 150 effective Aug. 21.

Lumber—Temporary ceiling increases in hardwood flooring and in certain items of hardwood lumber used in the production of hardwood flooring for house construction have been authorized by O. P. A. Order 8 to revised Regulation 97, Order 1, to Regulation 146, Order 1 to Regulation 155, Order 1 to Regulation 223, Order 3 to Regulation 368, Amendment 10 to Regulation 432 and Amendment 7 to Regulation 458, all effective Aug. 1.

Machines and Parts—Brand name sellers of machines, machine parts and industrial equipment who do not make the products sold under their brand names will no longer be designated as manufacturers under the regulation covering these products, O. P. A. has announced in Amendment 51 to Revised MPR 136, effective Aug. 20.

Machines and Industrial Equipment—Resellers' ceiling prices for several machines, machine parts and industrial equipment may be raised to reflect the full percentage markups of recent increases in their manufacturers' maximum prices, O. P. A. said in Amendment 2 to Order No. 637, to MPR 136; Amendment 1 to Order 645 to MPR 136; Amendment 1 to Order No. 642 to MPR 136; Amendment 2 to Order 647 to MPR 136; Amendment 4 to Order No. 506 to MPR 136, and Amendment 1 to Order No. 620 to MPR 136, all effective Aug. 23.

Metal Furniture—A seven per cent increase in manufacturers' maximum prices of metal household furniture has been authorized in revised O. P. A. Order 8, under Section 1499, 159E of Regulation 188, effective Aug. 12.

Paper—Manufacturers' ceilings for lower priced book and writing papers have been increased $7 to $24 a ton to offset higher costs for labor and raw materials. No increases have been given top grades. Amendment 7 to revised O. P. A. Regulation 451 and Amendment 11 to Regulation 450 both effective Aug. 16.

Pine Moldings—Jobbers of western pine moldings are permitted to compute their ceilings by using the percentage increase from the advance mill prices given them since March 31, in Amendment 4 to O. P. A. Regulation 601, effective Aug. 21.

Prepared Iron or Steel Scrap — Maximum prices of prepared iron or steel scrap, which formerly applied only to sales to consumer or their brokers, have been extended to apply to all buyers and sellers. In effect, it removes the exemption from price control of sales of prepared iron or steel scrap are not affected. Amendment No. 7 to MPR No. 4 is effective Aug. 26.

Primary and Secondary Lead—Dealer premiums for resellers of primary lead and of secondary lead have been raised to restore their average percentage markups in effect March 31, as required by the price control extension act of 1946, O. P. A. has announced. Amendment No. 9 to Revised Price Schedule No. 69, Amendment No. 3 to MPR No. 70 are both effective Aug. 23.

Protective Clothing — Manufacturers' ceilings for rubberized protective clothing have been increased 8.6 per cent, which can be passed on by distributors, in Amendment 28 to O. P. A. regulation 220, effective Aug. 19.

Radiators — Premium payments Regulation 5 (EPPR-5), covering production of convector radiators used for residential heating—is issued by Housing Expeditor Wyatt with an O. P. A. 10 per cent price increase, is expected to enable the industry to expand production within six months.

Shellac—Rising prices for imported unbleached shellac, has caused O. P. A. to establish a new formula for determining ceilings for producers' sales of bleached shellac in Amendment 2 to Regulation 245, effective Aug. 15.

Softwood Plywood—The March 31 percentage markups over acquisition costs for distributors and resellers of softwood plywood have been restored by O. P. A., in Amendment 4 to third revised MPR 13, effective Aug. 23.

Standard Wire Nails—Ceiling prices for retail sales of standard wire nails have been raised by O. P. A. in an action which brings the retail sales of nails under one regulation. Amendment 40 second revised supplementary Regulation 14 to general MPR and Amendment 2 to supplementary Order 151 are both effective Aug. 23.

Stock Millwork—Jobbers' maximum prices for stock millwork have been adjusted by O. P. A. to conform with resellers' provisions in the price control extension act of 1946. Amendment 13 to MPR 525 is effective Aug. 23.

Stock Millwork — Stock millwork specialties made from any species of pine now are priced under the same regulation as these items made from western pine, O. P. A. has ruled. Amendment No. 18 to Revised MPR 293 is effective Aug. 21.

Stock Millwork—Ceiling prices for retail sales of four building materials, stock millwork, pine stock millwork, Douglas fir doors and stock screen goods, have been raised by O. P. A. in Amendment 19 to Revised MPR 293, Amendment 2 to MPR 44, Amendment 5 to MPR 589, and Amendment 9 to MPR 381. All are effective Aug. 21.

Storage Batteries—Resellers of lead acid storage batteries, cells and plates may increase their ceiling prices by the same percentage their net invoiced costs have been raised by higher maximum granted manufacturers June 11, under Amendment 50 to Revised O. P. A. Regulation 136, effective Aug. 19.

Striking Tool Handles—An interim increase of 7 per cent in the maximum prices of striking tool handles for producers and distributors has been announced by O. P. A. in Amendment 38 to Second Revised Supplementary Regulation 14 to the general maximum regulation, effective Aug. 20.

Synthetic Resins—Manufacturers of one minor segment of synthetic resins, those containing butyl alcohol, may increase their ceiling prices when their delivered average cost of butyl alcohol is above 17 cents a lb., O. P. A. has announced. Amendment 13 to MPR 406 is effective Aug. 27.

Tires—Ceilings for all sellers of black and white sidewall passanger car tires have been established at 12.5 per cent above maxima for all-black sidewall tires, in Amendment 12 to revised O. P. A. Regulation 143 and Amendment 8 to revised Regulation 528 both effective Aug. 21.

Transformers — Ceilings on distribution transformers at the producers' level have been increased 12 per cent from the maxima in effect since April 15, in Order 672 under revised O. P. A. Regulation 136, effective Aug. 21.

Transformers — Price increase factor granted manufacturers of fluorescent transformers has been raised from 11 per cent to 20 per cent, in O. P. A. Amendment 3 to Order 572 under revised Regulation 136 and Amendment 47 to revised Regulation 136, both effective July 27.

Vises — The interim price increase granted manufacturers and resellers of vises on May 1 has been raised from eight per cent to 17 per cent, effective Aug. 23, O. P. A. announced. Amendment 1 to Order No. 615 under Revised MPR 136 is effective Aug. 23.

Wire and Cable—Manufacturers of wire and cable, except armored cable, may now revise their lists to include no more than the amounts permitted by the increases granted June 3 and June 4 and resellers who customarily sold off manufacturers' list may continue to do so under O. P. A. Amendment 13 to Regulation 82, effective July 27.

Wool Waste Materials—Woolen and worsted mill headings and shearling scrap are specifically excluded from coverage of the regulation governing raw and processed wool waste materials, O. P. A. said in Amendment 7 to MPR 123, effective Aug. 28.

Equipment and Supplies

LOCOMOTIVES

Two Coal-Burning Gas Turbines Ordered by Research Group

Orders have been placed for two gas-turbine locomotive units, including electric generators, by the Locomotive Development Committee of Bituminous Coal Research, Inc., according to Roy B. White, chairman of the committee and president of the Baltimore & Ohio. One unit will be built by the Allis-Chalmers Manufacturing Company, Milwaukee, Wis., and the other by the Elliott Company, Jeannette, Pa. Each will be encouraged to exercise its ingenuity in developing design details, Mr. White said.

The American Locomotive Company, the Baldwin Locomotive Works and the Lima Locomotive Company each have agreed to submit designs for the chassis and running gear of two test locomotives to be powered by the coal-fired gas turbines, and orders for this machinery will be placed after the designs have been studied by the committee, so that two complete test locomotives can be assembled.

This arrangement will make possible the construction of two complete gas-turbine

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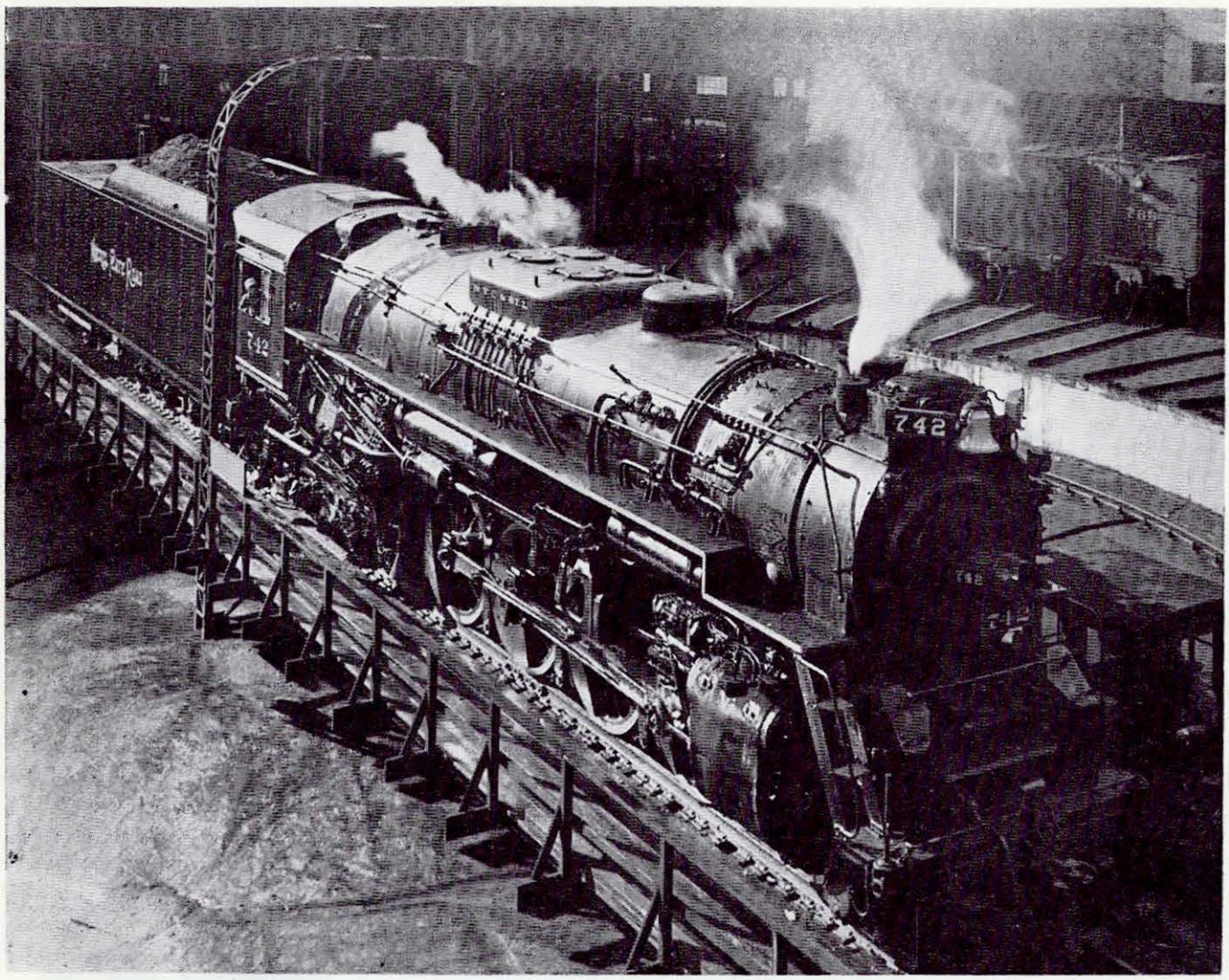

HEAVY PAYLOADS

. . . at passenger speeds

The Nickel Plate's fleet of fifty-five Lima-built 2-8-4s enables them to maintain the necessarily fast schedules required by today's freight demands. During the past five years, this railroad has been building up its motive power to enable it to handle maximum payloads at a maximum of efficiency and economy.

Freight train schedules are rapidly approaching the speeds of passenger schedules. Keep abreast of the times with power that is capable of meeting today's ever increasing demands.

LIMA LOCOMOTIVE WORKS INCORPORATED, LIMA, OHIO

locomotives which, it is expected, will be available for test purposes at about the same time. This increases substantially the scope of the project as originally planned and is expected to expedite the development of a satisfactory coal-burning gas-turbine locomotive for railroad use. It is confidently believed by those in charge of the project that these locomotives will create a new standard of performance and will at the same time make available a wide variety of coals for use as gas-turbine fuel.

Alco's 75,000th Locomotive To Be Exhibited in New York

The 75,000th locomotive to be built by the American Locomotive Company will be completed at Schenectady, N. Y., on September 18 and will be delivered a few weeks later to the Atchison, Topeka & Santa Fe for use in passenger service between Chicago and Los Angeles, Calif., it has been announced by R. B. McColl, president of American Locomotive. (See the *Railway Age* for August 3, page 205).

A 6,000-hp. Diesel-electric main-line locomotive, the new engine will be the first of an order for six such locomotives for the Santa Fe. During the week of September 22, Mr. McColl said, the new locomotive will be introduced to the railroad world jointly by American Locomotive and the Santa Fe in an exhibition at the private siding of the Waldorf-Astoria Hotel in New York.

The RHODESIAN RAILWAYS are inquiring for six locomotives of the 2-10-2 type.

FREIGHT CARS

The ATLANTA & SAINT ANDREWS BAY is inquiring for 100 50-ton wood-handling cars.

The DETROIT, TOLEDO & IRONTON is inquiring for 200 50-ton steel box cars and 100 70-ton steel hopper cars.

The NEW YORK CENTRAL has ordered 1,000 55-ton, 40 ft. 6 in. box cars and 1,000 55-ton, 40 ft. 6 in. automobile cars from its shop at East Rochester, N. Y.

The DONNER-HANNA COKE CORP. has ordered 85 70-ton, triple-hopper cars from the American Car & Foundry Co. The inquiry for this equipment was reported in the *Railway Age* for May 11, page 977.

The WESTERN MARYLAND has ordered 600 55-ton steel hopper cars from the Bethlehem Steel Company. Delivery will be made late in the first quarter or early in the second quarter of 1947. The inquiry for this equipment was reported in the *Railway Age* for August 24, page 355.

The BALTIMORE & OHIO has ordered 1,000 50-ton box cars from the Pressed Steel Car Company. Delivery of the cars, to be built at McKees Rocks, Pa., will begin in the first quarter of 1947. The inquiry for this equipment was reported in the *Railway Age* for August 24, page 355.

The NASHVILLE, CHATTANOOGA & ST. LOUIS has ordered from the Pullman-Standard Car Manufacturing Company 500 all-steel 40-ft., 6-in., 50-ton box cars, 200 50-ton, high-side gondola cars and 300 50-ton hopper cars. Total cost of the cars is estimated to be $3,500,000. Inquiry for these cars was reported in the *Railway Age* for August 17, page 314.

PASSENGER CARS

The READING has ordered 16 electric passenger coaches, to be operated as two-car units, from the American Car & Foundry Co. The electrical equipment will be built by the General Electric Co. The coaches, to cost $1,173,500, will seat a total of 1,376 passengers and will be used to supplement present equipment in the road's electrified suburban territory. Delivery is to be made in one year. The inquiry for this equipment was reported in the *Railway Age* for June 15, page 1201.

The BOARD OF TRANSPORTATION, New York, has requested bids by September 30, for 400 subway cars and 30 trucks. The bids are to be submitted on lots of 100, 200, 300 and 400 cars and on lots of 10, 20, and 30 trucks.

SIGNALING

The KANSAS CITY SOUTHERN has ordered eight sets of radio-phone communication equipment from the Aireon Manufacturing Corporation, to be installed on one freight locomotive now being built by Fairbanks, Morse & Co., and on five freight and two passenger locomotives being built by the Electro-Motive division of the General Motors Corporation.

Supply Trade

The **Tuco Products Corporation** has announced that **A. H. Adkins** will sell and service the firm's specialties in the southeastern territory. His headquarters will be at 7347 Wisconsin avenue, Bethesda 14, Md.

J. L. Onderdonk has been appointed an assistant vice president of the **American Car & Foundry Co.** Associated with the firm since 1912, Mr. Onderdonk will continue to make his headquarters at the Chicago sales office.

The **Rockwell Manufacturing Company**, Pittsburgh, Pa., has established a new hydraulics division, to specialize in the development of hydraulic equipment. **W. H. Marsh** will be general manager of the division.

Douglas L. Darnell, former sales manager, has been elected vice-president in charge of sales for the **Baker-Raulang Company**, Cleveland, Ohio. Mr. Darnell joined the firm's sales staff after World War I and was appointed sales manager in 1936.

R. S. Keefer has been appointed sales manager of the **Okonite Company,** Passaic, N. J., manufacturers of insulated wires and cables. He succeeds the late Edward J. Garrigan, vice-president in charge of sales. Mr. Keefer, formerly assistant sales manager of the company's Hazard insulated wire works division, started his career in the Hazard insulating mill at Wilkes-Barre, Pa., in 1922, later entering the sales department in which he has been active for the past 20 years.

Ed Collins, Railway Exchange Building, Chicago, and **Jack Armstrong,** Russ Building, San Francisco, Calif., it was announced, are representatives to certain key railroads for **S. Karpen & Brothers** and the **George B. Cross Company,** manufacturers and distributors, respectively, of Karpen transportation seating.

E. J. McGehee has been appointed sales manager of **Koppers Company, Inc.** Mr. McGehee, also a vice-president of the company, in his new capacity will coordinate Koppers sales activities on a company-wide basis and will retain his Pittsburgh, Pa., headquarters.

Mr. McGehee first became associated with the Koppers organization in 1934 and since that time has served in various executive positions in connection with the company's production and sale of pressure-treated timber for railway and utility work. He was appointed a vice-president in 1941.

E. J. McGehee

Before joining Koppers, Mr. McGehee was a production and sales executive of the Ayer & Lord Tie Company, which subsequently was purchased and merged with the Koppers Company. He is a past president of the Railway Tie Association and a member of the Western Railway Club, the New York Railway Club, the Pittsburgh Railway Club, and the American Wood Preservers Association. He is chairman of the Wood Industry Advisory Committee of the Office of Price Administration and secretary and treasurer of the Eastern Railroad Cross Tie Advisory Committee.

The appointment, effective September 1st, of **John P. Lawton** to the position of northwestern district manager for the **Graybar Electric Company** has been announced. Mr. Lawton will make his office at northwestern district headquarters in Seattle, Wash., where he has served as district sales manager since December, 1944.

The **H. K. Porter Company** has announced the acquisition of the **Brake Equipment & Supply Co.** of Chicago, manufacturers of brake parts for railway locomotives and freight cars, and airbrakes for export. Sales of the new acquisition will be handled by the Porter railway sales division. The new plant will make a total

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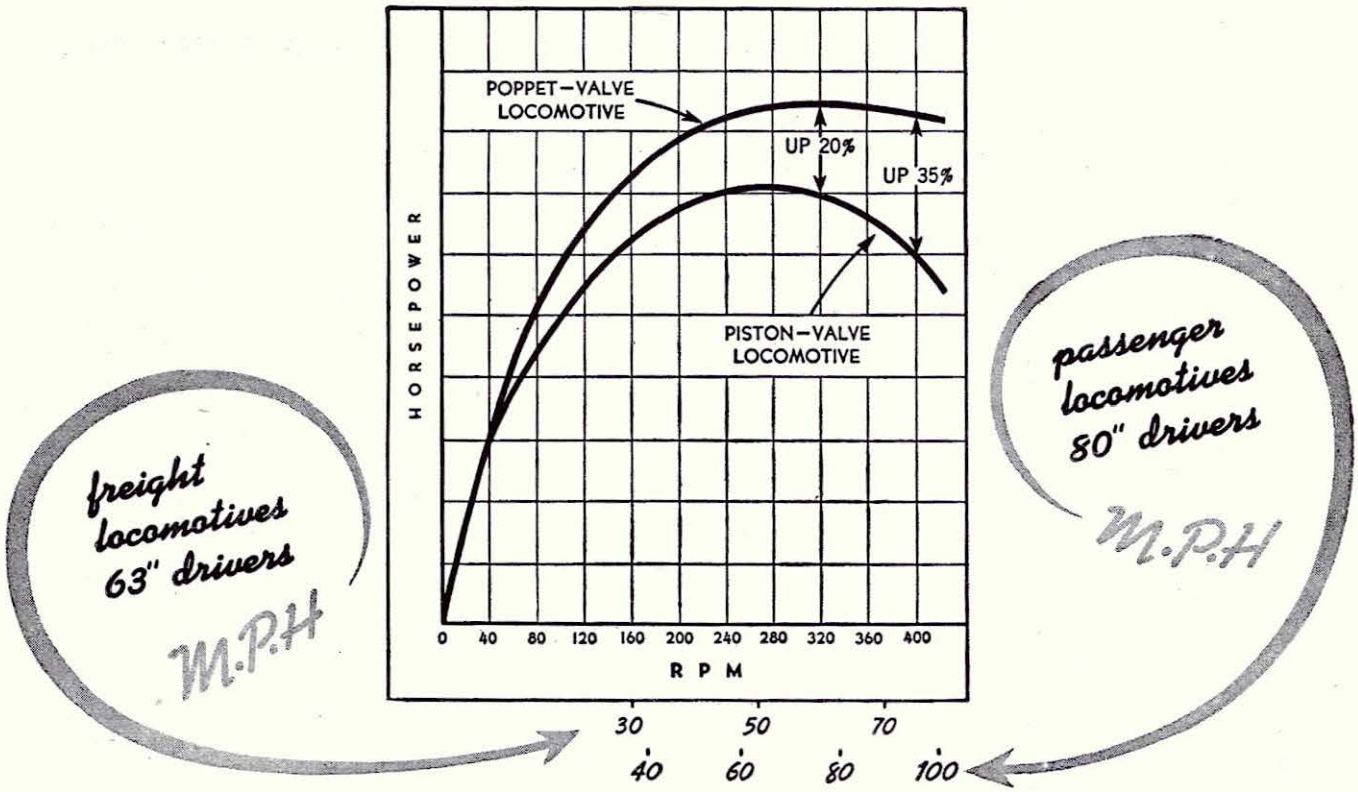
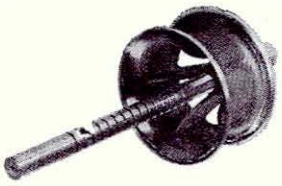


GREATER POWER for both freight and passenger locomotives

The outstanding increase in power, available by application of the Franklin System of Steam Distribution, is a function of revolutions per minute, not type of locomotive nor class of service. The increase can be as much or more for a freight locomotive with 63-inch drivers at 50 mph as with a passenger locomotive with 80-inch drivers at 63.5 mph.

The additional power is entirely the result of higher efficiency in converting steam into horsepower — through use of poppet valves and larger steam passages. It is produced without increased steam or fuel consumption.



Application of the Franklin System of Steam Distribution to existing or new locomotives is practical. The increased horsepower shown above is typical, as demonstrated by service records of presently equipped locomotives; however, we would be glad to prepare a comparative study on your own motive power.

FRANKLIN RAILWAY SUPPLY COMPANY, INC.

NEW YORK • CHICAGO • MONTREAL

STEAM DISTRIBUTION SYSTEM • BOOSTER • RADIAL BUFFER • COMPENSATOR AND SNUBBER • POWER REVERSE GEARS
AUTOMATIC FIRE DOORS • DRIVING BOX LUBRICATORS • STEAM GRATE SHAKERS • FLEXIBLE JOINTS • CAR CONNECTION

of eight plants operated by Porter, whose products include locomotives, railway specialties, springs, chemical equipment, pumps and oil field equipment.

The **Lake Erie Engineering Corporation,** Buffalo, N. Y., designers and manufacturers of hydraulic presses and special machinery, has taken over the **Feller Engineering Company** of Pittsburgh, Pa., specialists in hydraulic extrusion presses and allied lines, it has been announced. The activities of the former Pittsburgh company will be carried on by Lake Erie as its Feller engineering division. **K. Feller** will be general manager, with headquarters in the Empire Building, Pittsburgh.

R. A. Williamson, formerly of the **General Electric Company's** New York office, has been appointed manager of the railroad rolling stock division, transportation divisions, apparatus department, effective September 1, succeeding **T. F. Perkinson,** who has been transferred to the transportation engineering division. Mr. Williamson will be responsible for the

R. A. Williamson

sale, application and servicing for all railroad rolling stock business. This includes straight-electric locomotives, electrifications, steam- and gas-turbine electric locomotives, and railroad export business. His division also will handle electric car equipment for railroad service, and railroad passenger car and caboose equipment, such as axle-driven generators and controls, speedometers, and water fountains.

Mr. Williamson has had 20 years' experience in the design, application, sale and servicing of electric propulsion for all types of motive power. He started early in the transportation field, working for the Boston (Mass.) Elevated Railway in many capacities while taking a cooperative electrical course at the Massachusetts Institute of Technology, from which he was graduated with a master's degree in electrical engineering in 1927. He immediately went "on test" with General Electric at the Erie Works and from there, in April, 1928, he transferred to the transportation control engineering division, doing design and application work on the 3,000 volt d.c. electrification of the Delaware, Lackawanna & Western M. U. cars for suburban service in New Jersey. In April, 1930, he joined the service engineering division of the New York office to supervise the Lackawanna installation. Subsequently, he did similar work on the New York Central, the Pennsylvania, the Brooklyn-Manhattan Transit and the Hudson & Manhattan.

Mr. Williamson became marine superintendent of the New York district in 1939, supervising the installation of propulsion and electric equipment on ships built in that area. In 1944 he was made marine engineer for the district. He is a member of the American Institute of Electrical Engineers, the Society of Naval Architects & Marine Engineers, the New York Railroad Club, the Technology Club of New Jersey and the Propeller Club, Port of New York.

OBITUARY

Ernest Duchesne, mechanical superintendent of all plants of the American Locomotive Company and its subsidiaries, died on August 25 at his home in Schenectady, N. Y. He was 67 years old. Born in Napierville, Que., Mr. Duchesne joined the Montreal Locomotive Works, an American Locomotive subsidiary, in 1904, and transferred to Schenectady in 1920 as general small-tool supervisor. Seven years ago he was appointed to the position he held at the time of his death.

Charles H. McCrea, president and a director of the National Malleable & Steel Castings Co. since September, 1942, died in Cleveland, Ohio, on August 24. He was 56 years old.

Born in Logansport, Ind., and a graduate of Purdue university in 1912, Mr. McCrea spent almost his entire business career with National Malleable, joining the company in Toledo, Ohio, in 1913, as a special engineer. He was advanced through many promotions and served in various plants and sales offices, including sales work in many foreign countries. He was a director of the Interlake Iron Corporation and of the Railway Business Association.

Abandonments

NEVADA COPPER BELT.—This road has applied to the Interstate Commerce Commission for authority to abandon its entire line from Wabuska, Nev., to Hudson, 29 miles.

NORFOLK & WESTERN.—Examiner J. S. Prichard has recommended in a proposed report that Division 4 of the Interstate Commerce Commission authorize this road to abandon a branch line, extending 29.69 miles from a point near Narrows, Va., to Bastian. The report also recommended that the commission imposed employee-protection conditions similar to those prescribed in the precedent-setting Burlington case, 257 I. C. C. 700.

SACRAMENTO NORTHERN.—Examiner Paul C. Albus has recommended in a proposed report that Division 4 of the Interstate Commerce Commission authorize this road to abandon 1.34 miles of track in Chico, Calif., in connection with the establishment of new facilities for interchange of traffic with the Southern Pacific at that point.

Construction

CANADIAN NATIONAL.—This road has been authorized by the Canadian government to build a 55-mile branch line from Barraute to Kiask Falls on the Bell river in Quebec's Abitibi district. One of the chief functions of the new branch, which will serve approximately 75,000 persons in the area, will be the carrying of pulpwood for the Canada Paper Company.

CHESAPEAKE & OHIO.—This road has applied to the Interstate Commerce Commission for authority to construct a 25-mile extension to its so-called Elkhorn & Beaver Valley branch between Wayland, Ky., and a point near Indian creek. The proposed extension would serve mining interests in that locality.

CLINCHFIELD.—Acting upon a motion filed by this road together with the Atlantic Coast Line and the Louisville & Nashville, Division 4 of the Interstate Commerce Commission has dismissed without prejudice an application of the Carolina, Clinchfield & Ohio, lessor, for authority to construct, for operation by it for the lessees, the A. C. L. and the L. & N., a 14.5-mile extension from Fremont, Va., into an undeveloped coal producing area, which would touch no city or town.

FLORIDA EAST COAST.—This road has applied to the Interstate Commerce Commission for authority to construct a 7-mile branch line and a 2½-mile spur in Palm Beach County, Fla. The proposed construction, to be financed by treasury cash, would serve a sugar mill and other industries.

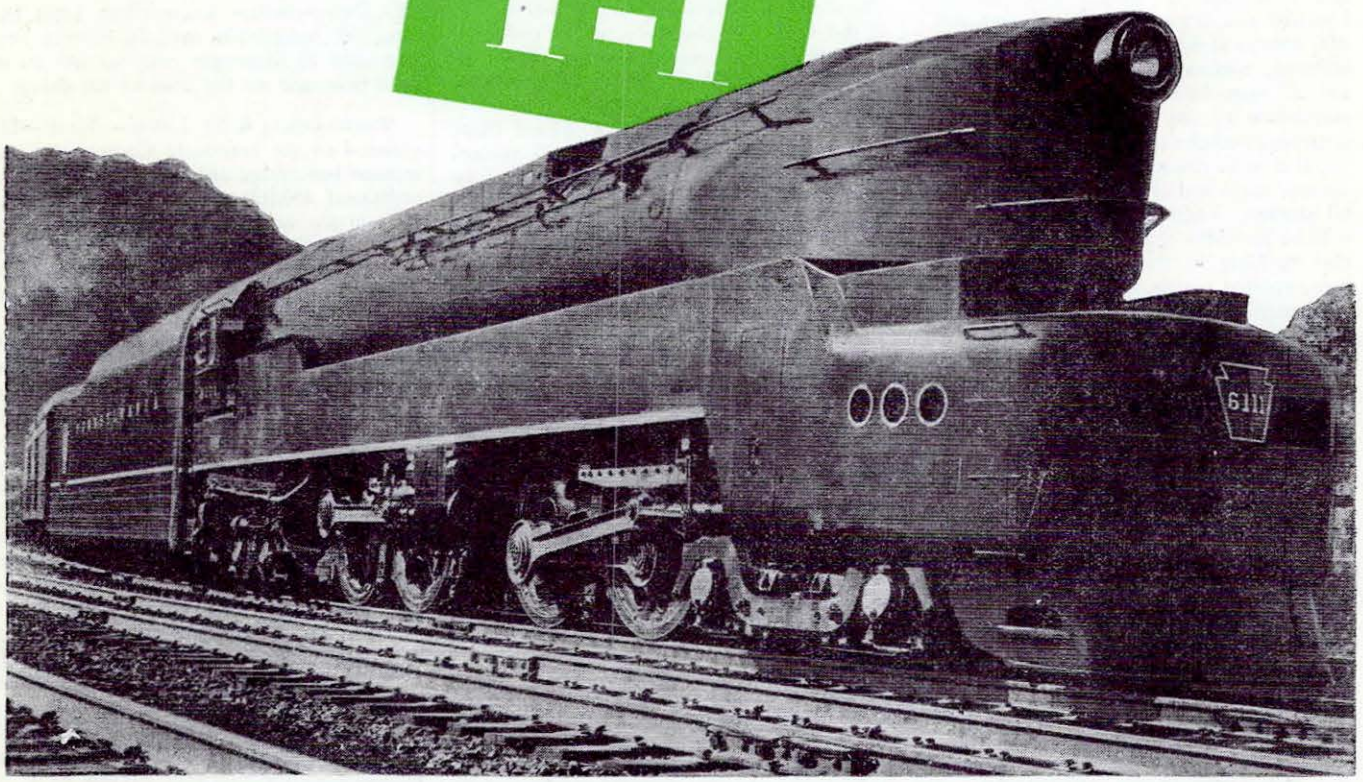
LOUISVILLE & NASHVILLE.—This road has received authority for an improvement and construction program which, when completed, will cost $408,103. The projects and their individual costs are as follows: Extension of passing track at Oakdale, Ky., $27,012; reducing grade at Benton cut, Tenn., $137,673; spur for coal mine at Centertown, Ky., $199,229; concrete shop building at South Louisville, Ky., $44,189.

NEW YORK, NEW HAVEN & HARTFORD.—This road has awarded a contract to the Mariani Construction Company, New Haven, Conn., for the reconstruction of bridge 17.41 at Meriden, Conn. The estimated cost of this project is $29,000. Authorization has been received for a project involving the installation of automatic signals of the color light type to replace the present banner type automatic signals from Boston switch to South Worcester, Mass., at a probable cost of $168,200. A project involving the construction of additional parking area at Larchmont, N. Y., at a probable cost of $24,400, also has been authorized.

SARATOGA & SCHUYLERVILLE.—This road, according to its president, J. M. Tinsley, is contemplating a $200,000 expansion program which will include the construction of an enginehouse and repair shop. The road's business, Mr. Tinsley added, has increased by 40 per cent since January 1, when certain trackage was purchased from

News Department continued on next left-hand page

the Pennsylvania's T-1



is equipped with SECURITY CIRCULATORS

That Security Circulators are recognized as an important contribution to modern locomotive design is shown by their use in The Pennsylvania Railroad's famous T-1 class locomotives, each of which has five circulators in the firebox.

AMERICAN ARCH COMPANY, INC.

NEW YORK • CHICAGO

SECURITY CIRCULATOR DIVISION

the Boston & Maine. (See the *Railway Age* for January 12, page 170.)

SOUTHERN.—This road plans to construct a modern Diesel-electric locomotive heavy repair and maintenance shop, to cost an estimated $887,500, at its Citico shops in Chattanooga, Tenn., it has been announced by Ernest E. Norris, president. Work on the new facility, the first of its kind on the Southern for the complete overhauling and rebuilding of freight and passenger Diesels, will begin "as soon as possible," Mr. Norris said. Plans contemplate a new building, approximately 132 ft. wide by 294 ft. long, facing the present office and storehouse at the shops. It will contain four repair tracks and a wheel-release track, together with machine shop, cleaning room, storage space and other features. Increased oil storage, washing and sanding facilities will be provided nearby. Mr. Norris said that building of the new shop had been contemplated for some time in order more efficiently to service and repair the Southern's rapidly increasing fleet of Diesel locomotives. With the delivery of Diesels now on order, the number of units to be maintained on the western lines of the railway at Citico will total 100, he said.

Financial

C. & O., Nickel Plate Protest Conditions in Wheeling Deal

The Chesapeake & Ohio and the New York, Chicago & St. Louis have filed exceptions to the proposed report wherein Examiner Ralph R. Molster has recommended that Division 4 of the Interstate Commerce Commission conditionally approve the transaction whereby the Nickel Plate would acquire from the C. & O. 78,145 shares of Wheeling & Lake Erie common stock, thus building its holdings of the latter's voting shares to about 46.9 per cent of the total. Proceeding along the lines of the statement made by C. & O. Chairman Robert R. Young when the examiner's report was issued (see *Railway Age* of July 27, page 146), the exceptions protest the conditions which the examiner would have the commission attach to its approval of the transaction, particularly his recommendation that the selling price be limited to the amount which the C. & O. paid for the stock—$4,168,388 or $53.34 per share as compared with the $5,470,150 or $70 per share proposed in the application.

The C. & O. said that if Examiner Molster's recommendations are approved by the commission, the action would result in the "unjust enrichment" of the Nickel Plate and its minority stockholders. "Fair and honest dealing between these companies does not require, and does not even admit, the sale of these shares to Nickel Plate at any such price," it continued. "The directors of the Chesapeake & Ohio cannot reasonably be asked to approve the sale when to do so would be to invite law suits at the instance of the Chesapeake & Ohio stockholders." The C. & O. added that the sale of the stock at $53.34 per share would result in a "gift" to the Nickel Plate of $1,301,762.

According to the C. & O., the last sale of W. & L. E. common stock was in July, 1945, when 59,400 shares were purchased by the Pennroad Corporation at $53.50 per share. The C. & O. said that the $70 per share price was reasonable, adding that the Nickel Plate could not acquire such an amount of stock from any other source at a price as low as $70.

The Nickel Plate, meanwhile, observed that while it could not object to obtaining the stock at a lower price, it feared that if the C. & O. refused to sell at the price recommended, it would lose its chance to purchase the stock and thus obtain control of the W. & L. E.

Both the C. & O. and the Nickel Plate also held that Examiner Molster's recommendation that the New York Central be assured access to certain Ohio coal fields would be prejudicial to the rights of the W. & L. E. and the Nickel Plate.

CHESAPEAKE & OHIO.—*Equipment Trust Certificates.*—Division 4 of the Interstate Commerce Commission has authorized this road to assume liability for $1,750,000 of 1½ per cent serial equipment trust certificates, the proceeds of which will be applied toward the payment of $2,246,049 for 790 50-ton, all-steel hopper cars. The certificates will mature in 10 equal annual installments starting August 1, 1947. They will be sold at 99.517, the bid submitted by Halsey, Stuart & Co. and associates, which had been accepted subject to commission approval. On this basis, the average annual cost will be approximately 1.59 per cent.

DETROIT, TOLEDO & IRONTON.—*Notes.*—Division 4 of the Interstate Commerce Commission has authorized this road to issue at par $2,000,000 of 1½ per cent bank loan notes, the proceeds of which, together with treasury funds, will be applied toward the redemption on October 1 of a similar amount of 10-year serial notes. The applicant will make separate arrangements for paying the remaining $400,000 of the latter which matures October 1. The new notes, to be in denominations of $200,000, will mature in 10 equal semi-annual installments, starting April 1, 1947. They will be sold to the Union Trust Company of Pittsburgh, Pa., whose bid of 1½ per cent had been accepted subject to commission approval.

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"The applicant," the commission said, "considers it desirable to increase the number of shares so that the market price will be in the 20's or 30's, thereby encouraging investors in the territory served by it to acquire some of the stock. The high price at which the shares are selling and the limited amount of the issue has inhibited trading in the shares and has also resulted in sharp fluctuations. . . . Investors of moderate means are deterred from purchasing the shares for fear they will obtain them at several points above the last quotation. Also, in case they must sell such shares they may be required to accept several points less than the last quotation. It is stated that a stable market for investors in railroad stocks can not be maintained where less than 500,000 shares are outstanding, and the issue of a larger number of shares should steady the market."

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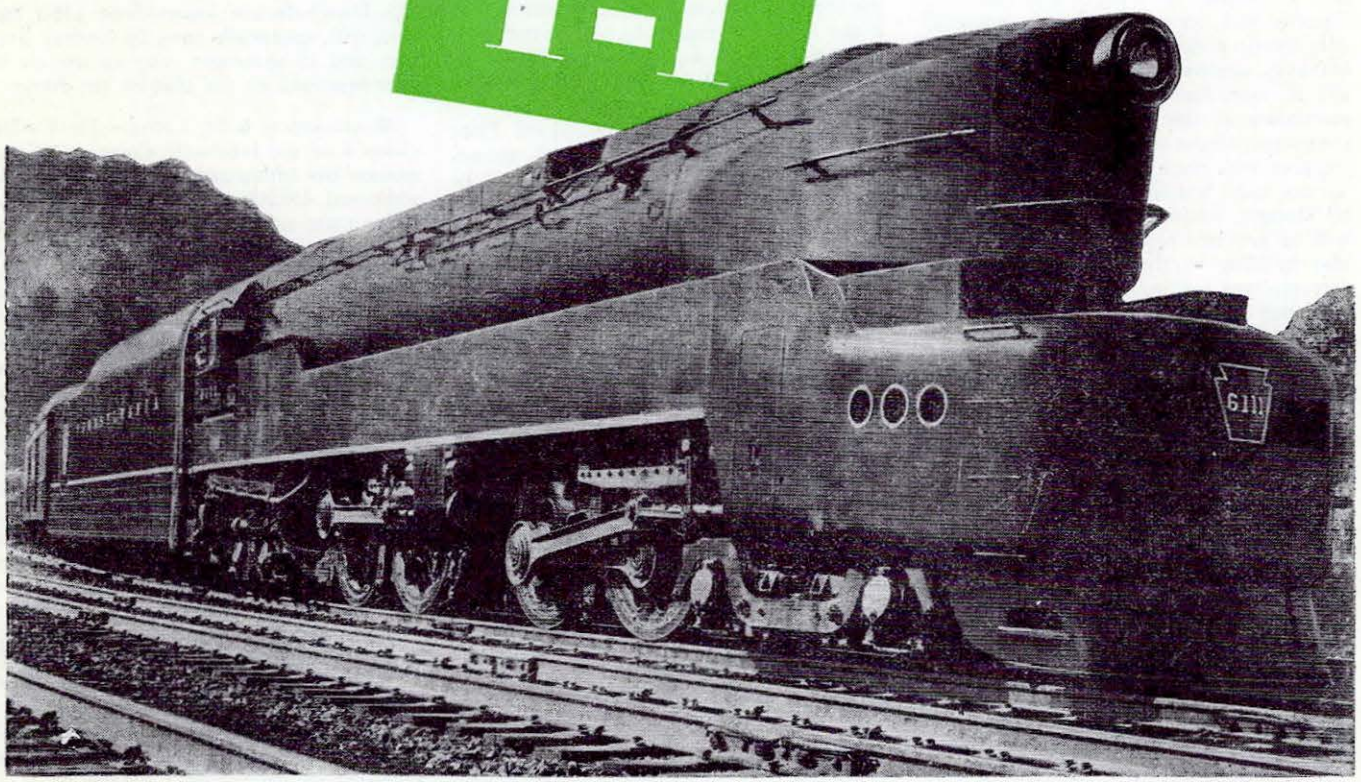

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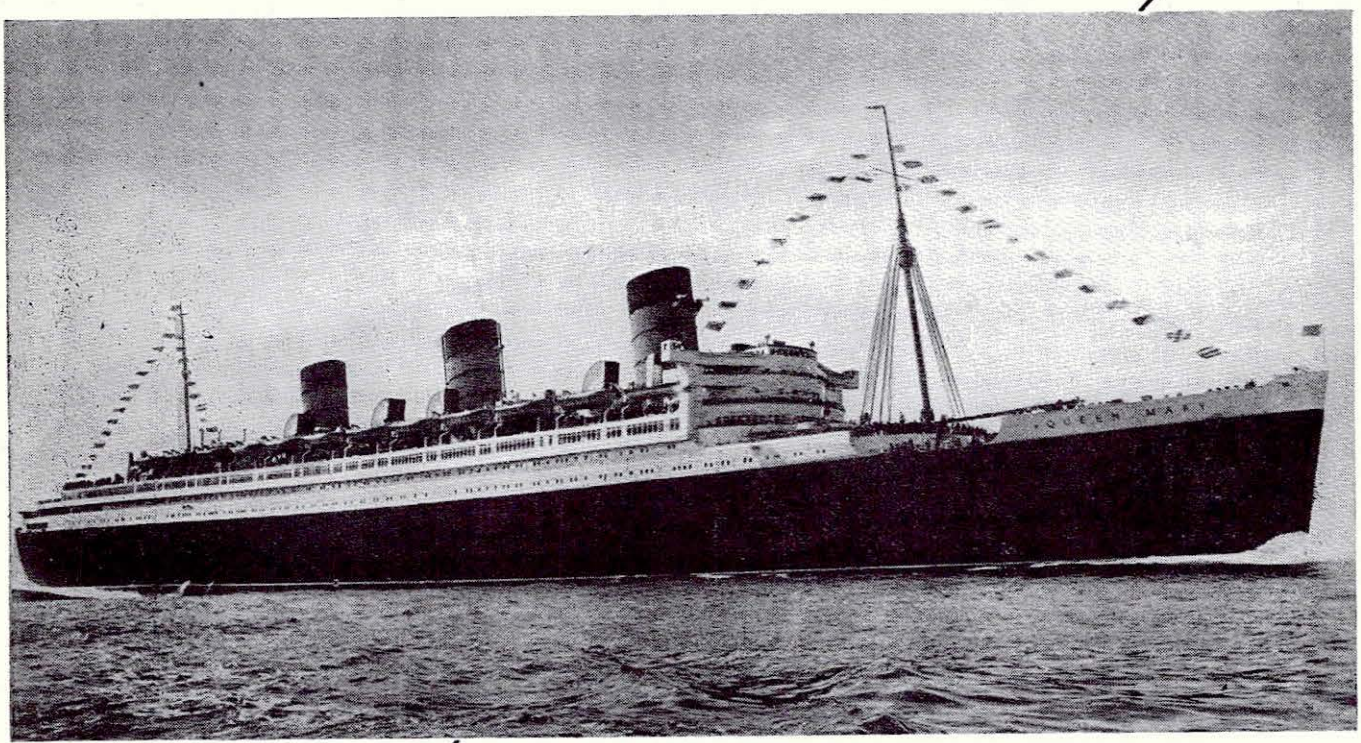

NEW YORK

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Montreal, Canada, THE SUPERHEATER COMPANY, LTD.

A-1811 (A-1341)

Superheaters • Superheater Pyrometers • Exhaust Steam Injectors • Steam Dryers • Feedwater Heaters • American Throttles

capitalization from $105,946,995 to $75,000,375 and the reduction of annual fixed interest charges from $3,159,045 to $1,513,731, has been upheld by the U. S. Circuit Court of Appeals in St. Louis, Mo.

Average Prices Stocks and Bonds

	Aug. 27	Last Week	Last Year
Average price of 20 representative railway stocks	57.96	61.51	56.68
Average price of 20 representative railway bonds	95.06	97.68	96.02

Dividends Declared

Bangor & Aroostook.—5% Preferred, quarterly, $1.25, payable October 1 to holders of record August 28.

Chesapeake & Ohio.—Quarterly, 75c, payable October 1 to holders of record September 6.

Chicago South Shore & South Bend.—Common, quarterly, 30c, payable September 16 to holders of record August 31.

Erie & Pittsburgh.—7% guaranteed, quarterly, 80c, payable September 10 to holders of record August 31.

Union Pacific.—Common, quarterly, $1.50; and, 4% preferred, semi-annually, $2.00; both payable October 1 to holders of record September 3.

Railway Officers

EXECUTIVE

Arthur B. Nichols, vice-president and clerk of corporation of the Boston & Maine, with headquarters at Boston, Mass., has retired after more than 52 years of railroad service.

R. T. Rossell, president of the Union, the Youngstown & Northern, and the Etna & Montrose, with offices at Pittsburgh, Pa., has retired from this post on the three roads after more than 45 years in railroading. **Fred W. Okie,** who succeeds him, has also been elected to a directorship in these companies. A biographical account and a photograph of Mr. Okie appeared in the August 3 issue of *Railway Age.*

FINANCIAL, LEGAL AND ACCOUNTING

E. C. McHugh has been appointed secretary and treasurer of the Bessemer & Lake Erie, the Union, the Youngstown & Northern, and the Etna & Montrose, with offices at Pittsburgh, Pa., succeeding **G. W. Kepler,** who has retired after 55 years in railway service. Mr. McHugh was serving as assistant to the president of the B. & L. E. and as vice-president of the Union at the time of his appointment.

Thomas T. Railey, assistant to counsel for the trustee of the Missouri Pacific, has been appointed also senior law officer of the railroad, with headquarters as before at St. Louis, Mo. **Toll R. Ware,** assistant interstate commerce counsel, has been promoted to general attorney and commerce counsel, at St. Louis, succeeding **H. H. Larimore,** whose recent death was reported in the *Railway Age* of August 3. **George W. Holmes,** assistant commerce counsel, succeeds to the duties of Mr. Ware, with the title of commerce counsel.

William R. C. Cocke, whose appointment as general counsel of the Seaboard Air Line, with headquarters at Norfolk, Va., was announced in the August 17 *Railway Age,* was born at Montgomery, Ala., on December 31, 1884, and was educated at Virginia Military Institute and the University of Virginia, from which he received

William R. C. Cocke

his law degree in 1909. He practiced law at Seattle, Wash., and Birmingham, Ala., then was appointed general counsel for the Seaboard in 1929, at Norfolk. When receivers were appointed for the Seaboard in 1930, Mr. Cocke was named a counsel for the receivers, and served in that capacity until his election as general counsel for the reorganized company.

OPERATING

J. R. Thorne, whose appointment as superintendent of the North Florida division of the Seaboard Air Line was announced in the August 17 *Railway Age,* was born and educated in Louisiana, and began his railroad career with the Seaboard in 1926 as secretary to the superintendent. He served in positions of increasing importance at Jacksonville, Fla., Savannah, Ga., Montgomery, Ala., Richmond, Va., and West Palm Beach, Fla., and was appointed assistant superintendent of the road's South

J. R. Thorne

Florida division at Tampa, Fla., on March 1, 1943. From Tampa he was moved to Norfolk, Va., as assistant chief of personnel, which post he occupied until November, 1943, when he entered the United States Army as an officer in the 722nd Railway Operating Battalion. Mr. Thorne held the rank of major when he was honorably discharged from the armed forces on May 31, 1946. He was appointed assistant superintendent of the Seaboard's North Florida division on June 1, 1946, and was serving in that capacity at the time of his recent promotion.

George W. Covert, assistant general superintendent of the Montour, has been appointed general superintendent with supervision over operating and mechanical departments, and headquarters as before at Coraopolis, Pa., succeeding **James Nagel,** who has retired because of ill health.

S. W. Crabbe, assistant general superintendent of the New Brunswick district of the Canadian Pacific, with headquarters at St. John, N. B., has been appointed general superintendent there, effective September 1, succeeding **T. C. Macnabb,** who is retiring.

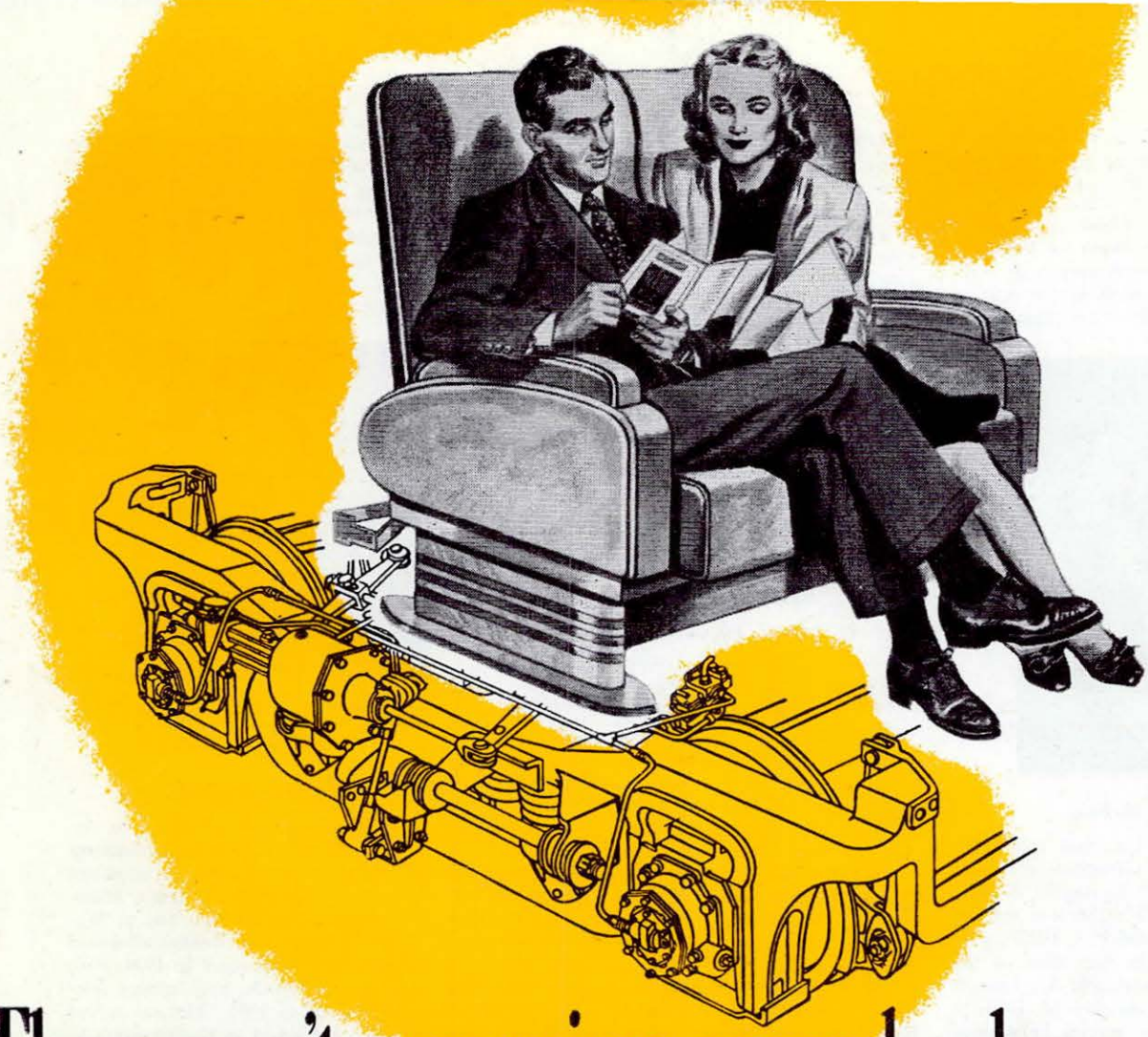
J. R. Shea, whose appointment as superintendent station operations of the Seaboard Air Line, with headquarters at Jacksonville, Fla., was announced in the *Railway Age* of August 17, was born in Kentucky

J. A. Shea

and began his career in railroading as a yard clerk for the Louisville & Nashville at Winchester, Ky., in 1909. He served the Louisville & Nashville in various capacities until 1926 when he entered the employ of the Seaboard as chief clerk to the vice-president and general manager. Mr. Shea was successively advanced through the positions of supervising agent, supervisor of claim prevention and assistant superintendent of station operations. He was serving in that post at the time of his latest promotion.

A. A. Freiberger, chief dispatcher on the Chicago Great Western, with headquarters at Stockton, Ill., will be advanced to superintendent of the Illinois Division, at Oelwein, Iowa, effective September 1, succeeding **H. R. Halverson,** who will be transferred to the Minnesota division, with headquarters at St. Paul, Minn. Mr. Halverson will succeed **G. F. Orlemann,** who is retiring. **A. P. Ford,** acting superintendent of the Minnesota division, will become assistant superintendent of that division. **L. E. Hartman,** road foreman of engines on the Illinois division, will be promoted to trainmaster at Oelwein, succeeding **R. L. Reimer,** who will be transferred to the Minnesota division, with headquarters at St. Paul. **W. O. Lehr,**

News Department continued on next left-hand page



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Your average passenger never realizes that modern brakes make possible your fast schedules which attracted him. Nor does he reason that all the comforts you provide would be of little value without smooth brake action. Yes, he thrills to your streamlined equipment, but chills if you don't get him there on time!

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Brakes are Basic to Railroad Progress

Westinghouse Air Brake Co.

WILMERDING, PA.

yardmaster at Chicago, has been promoted to terminal trainmaster at that point, effective August 1.

Curtis A. McRee, whose appointment as assistant general manager of the Seaboard Air Line with headquarters at Savannah, Ga., was announced in the August 17 *Railway Age,* was born on January 22,

Curtis A. McRee

1898, at Watkinsville, Ga., and was graduated from the Georgia Institute of Technology, receiving a B. S. degree in civil engineering in 1922. Mr. McRee entered railroad service on January 8, 1923, as an engineering inspector in the office of the chief engineer of the Seaboard Air Line at Norfolk, Va. From February 14, 1924, to December 15, 1933, he served in various capacities in the maintenance of way and structures department, including such positions as assistant to the division engineer, assistant division engineer, assistant roadmaster, division engineer, and roadmaster, becoming trainmaster on the latter date. Mr. McRee was appointed assistant superintendent of the North Carolina division on May 15, 1942, and advanced to the post of superintendent of the Virginia division with headquarters at Raleigh, N. C., in 1943, leaving that post in November of the same year to enter the United States Army. Mr. McRee was placed in command of the 722nd Railway Operating Battalion, and attained the rank of colonel when he was honorably discharged in May of this year. He returned immediately to his former post at Raleigh, which he maintained until the time of his promotion.

TRAFFIC

Job H. Little, commercial agent of the Southern, has been appointed division freight agent, with headquarters as before at Columbia, S. C.

J. M. Parramore, assistant general freight agent of the Grand Trunk Western, has been promoted to general freight agent, with headquarters as before at Chicago, succeeding **Ray F. Clark,** who has retired.

Bert A. Stokke, grain, flour and coal agent of the Chicago & North Western and the Chicago, St. Paul, Minneapolis & Omaha, has been promoted to general agent, with headquarters at Spokane, Wash., succeeding **Walter K. Neal,** who has retired after 53 years service.

Dan J. McCarthy, traveling freight agent for the Reading at New York, has been appointed general agent there, succeeding **Beeber Gross,** whose promotion to industrial agent at Philadelphia, Pa., was noted in the August 17 issue of *Railway Age.*

ENGINEERING & SIGNALING

G. L. Plow, division engineer of the Ottawa division of the Canadian National, with headquarters at Ottawa, Ont., has been transferred to the Levis division at Levis, Que. **G. N. C. Allen,** assistant division engineer, St. Lawrence division, Montreal, Que., has been named to succeed Mr. Plow as division engineer at Ottawa.

MECHANICAL

M. C. Sharp, Diesel supervisor of the Chicago, Rock Island & Pacific, with headquarters at Memphis, Tenn., has been promoted to superintendent of automotive equipment, with headquarters in Chicago, succeeding **L. W. Downey,** who has resigned.

SPECIAL

Warren T. White, whose appointment as director of public relations of the Seaboard Air Line at Norfolk, Va., was announced in the August 17 *Railway Age,* was born at Centenary, N. C., on January 30, 1895, and received a B. S. degree from Clemson College, South Carolina, in 1917. He entered railroading in February, 1923, as development agent of the Seaboard Air Line, after serving as an officer in the infantry of the United States Army and filling positions in other industries. In June, 1925, he became assistant general development agent, advancing to the capacity of general development agent in September, 1927. In January, 1944, Mr.

Warren T. White

White was appointed special assistant to the receivers in charge of public relations and associated matters, the post he maintained until his recent promotion.

Herman A. Benton, whose appointment as director of personnel of the Seaboard Air Line, with headquarters at Norfolk, Va., was announced in the August 17 issue of *Railway Age,* was born at Monroe, N. C., on November 11, 1883, and began his railway career in 1900, in the agency and train service of the Seaboard Air Line. From 1903 to 1906 he served as a freight conductor and yardmaster for the Mexican Central, then returned to the S. A. L. as yardmaster at Abbeville, S. C., where he became general yardmaster a few months later, and subsequently transferred to Atlanta, Ga. In 1914 he became trainmaster and in 1925 was promoted to superintendent of the Georgia division at Atlanta, transferring to Tampa, Fla., in 1926, and to Savannah, Ga., in 1928. Mr. Benton advanced to assistant general manager in 1934, with headquarters at Norfolk, and became general manager there in 1936. He was named executive general agent to the receivers in June, 1942, the post he held until his new appointment.

Herman A. Benton

PURCHASES AND STORES

F. S. Austin, general purchasing agent of the New York Central, will become manager of purchases and stores effective September 1, with headquarters as before at New York. **A. L. Prentice,** manager of stores and reclamation at Ashtabula, Ohio, will then succeed Mr. Austin as general purchasing agent at New York. **F. J. McMahon,** general storekeeper at Collinwood, Ohio, has been appointed assistant general supervisor of stores there, effective also on September 1.

OBITUARY

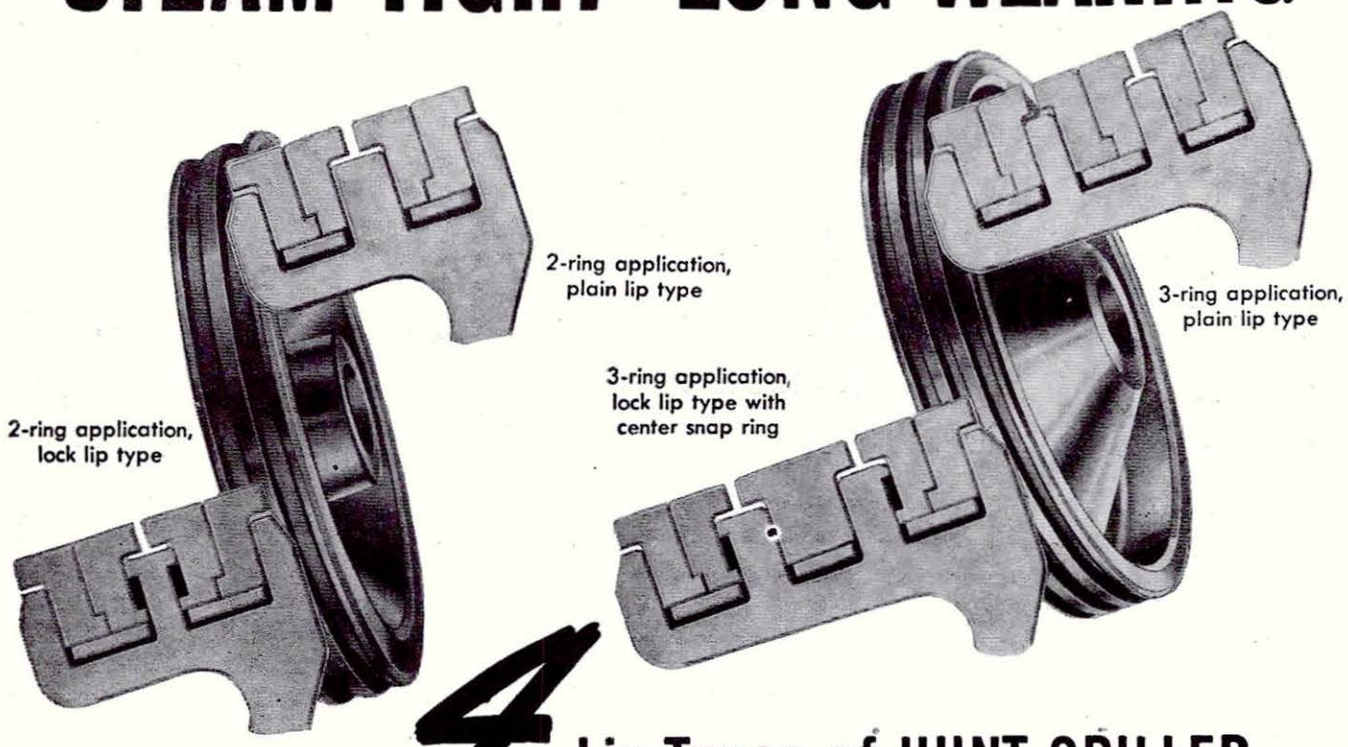
E. F. McPike, who retired in 1938 as superintendent of perishable freight service on the Illinois Central at Chicago, died on August 21, at San Diego, Cal.

Horace Johnson, who retired in 1931 as president of the Duluth & Iron Range (now the Duluth, Missabe & Iron Range), after 54 years in railroading, died on August 26 in St. Luke's hospital, Duluth, Minn., at the age of 90.

George T. Johnson, who retired on February 1 as assistant electrical engineer of the New York, New Haven & Hartford, died of a heart ailment at his summer home at Hyannis, Mass., on August 26. His age was 70, and during his career he had spent more than 41 years in railway service. A biography of Mr. Johnson appeared in the February 23 issue of *Railway Age,* in connection with his retirement.

Table of Operating Revenues and Expenses appears on the next left-hand page

STEAM-TIGHT LONG-WEARING


2-ring application, plain lip type
3-ring application, plain lip type
3-ring application, lock lip type with center snap ring
2-ring application, lock lip type

4 Lip Types of HUNT-SPILLER Duplex Sectional Packing for Better Light-Weight Steel Piston Performance . . .

HUNT-SPILLER packing rings fit four light weight piston types and may be had in gun iron, combination gun iron and bronze, and all-bronze. Each is cast and machined to exacting standards of control, quality, and precision which have identified HUNT-SPILLER products for 136 years. You can depend upon them. Also HUNT-SPILLER Duplex Sectional Lock Lip Type valve packing rings.

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HUNT-SPILLER

LIGHT WEIGHT STEEL PISTONS AND VALVES DUPLEX SECTIONAL PACKING AIR FURNACE GUN IRON

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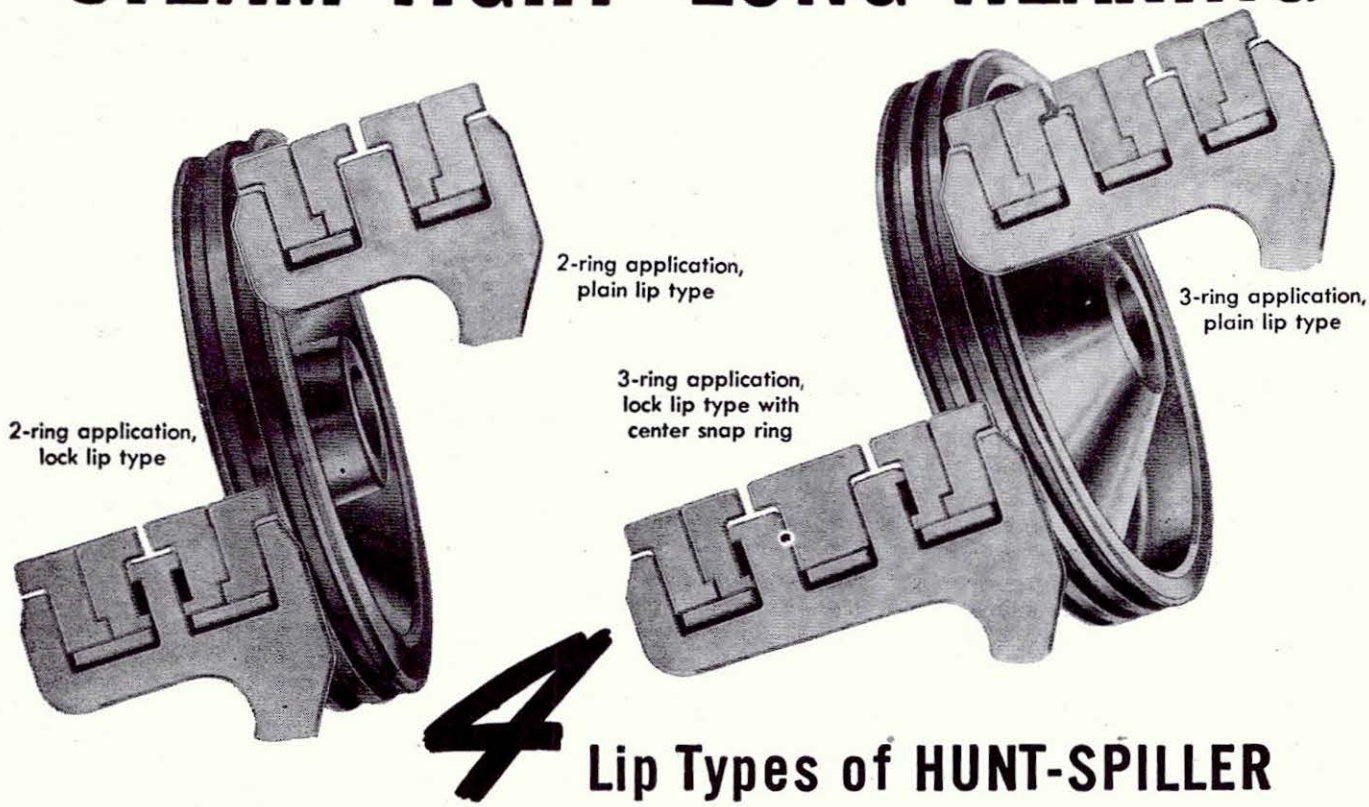
Plates	Cold Finished Steel	Boiler Tubes	Nails, Rivets, etc.
Sheets	Tool Steel	Welding Rod	Machinery

STEAM-TIGHT LONG-WEARING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30 Church St., New York 7, N. Y.

HUNT-SPILLER

LIGHT WEIGHT STEEL PISTONS AND VALVES DUPLEX SECTIONAL PACKING AIR FURNACE GUN IRON

Operating Revenues and Operating Expenses of Class I Steam Railways

Compiled from 129 monthly reports of revenues and expenses representing 133 Class I steam railways

(Switching and Terminal Companies Not Included)

FOR THE MONTH OF JUNE, 1946 AND 1945

Item	United States		Eastern District		Southern District		Western District	
	1946	1945	1946	1945	1946	1945	1946	1945
Miles of road operated at close of month	227,692	228,267	55,851	56,005	43,300	43,328	128,541	128,934
Revenues:								
Freight	$458,483,930	$610,670,781	$171,219,936	$221,256,512	$95,879,503	$109,106,389	$191,384,491	$280,307,880
Passenger	106,603,754	152,185,067	51,249,779	63,350,261	15,430,378	26,525,956	39,923,597	62,308,850
Mail	10,418,065	10,211,124	3,817,070	3,549,799	1,782,400	1,789,253	4,818,595	4,872,072
Express	6,801,462	12,931,571	3,676	3,631,117	878,967	1,642,040	5,918,819	7,658,414
All other operating revenues	29,632,200	33,947,043	14,002,380	15,080,732	3,805,304	4,527,771	11,824,516	14,338,540
Railway operating revenues	611,939,411	819,945,586	240,292,841	306,868,421	117,776,552	143,591,409	253,870,018	369,485,756
Expenses:								
Maintenance of way and structures	95,433,435	115,026,606	33,814,534	41,006,121	19,299,582	19,691,013	42,319,319	54,329,472
Depreciation	10,028,988	9,852,416	4,335,362	4,292,114	1,618,082	1,553,626	4,075,544	4,006,676
Retirements	463,789	1,302,605	161,868	176,760	82,538	79,515	219,383	1,046,330
Deferred maintenance	101,648	*448,374	*104,743	*237,614	794,781		*588,390	*210,760
Amortization of defense projects	28,906	2,211,551	11,598	655,304	15,804	387,876	1,504	1,168,371
Equalization	1,057,518	*139,008	653,100	*825,108	625,509	513,910	*221,091	172,190
All other	83,752,586	102,247,416	28,757,349	36,944,665	16,162,868	17,156,086	38,832,369	48,146,665
Maintenance of equipment	116,332,422	137,547,370	49,833,953	56,134,890	21,840,496	26,550,394	44,657,973	54,862,086
Depreciation	18,229,912	17,979,726	7,655,606	7,583,896	3,679,764	3,598,490	6,894,542	6,797,340
Retirements	*21,852	*19,885	*10,773	*717	*2,046	*9,031	*9,033	*10,137
Deferred maintenance and major repairs	8,255	*177,873	*9,965	*612	230,229		*212,009	*177,261
Amortization of defense projects	792,493	17,982,628	334,926	6,091,010	114,798	4,370,945	342,769	7,520,673
Equalization	79,802	*47,536	28,810	5,718	110,293	*55,071	*59,301	1,817
All other	97,243,812	101,830,310	41,835,349	42,455,595	17,707,458	18,645,061	37,701,005	40,729,654
Traffic	13,930,897	11,820,901	5,072,013	4,287,976	2,570,441	2,215,486	6,288,443	5,317,439
Transportation—Rail line	261,968,536	250,132,689	113,109,672	108,209,557	46,202,806	41,863,072	102,656,058	100,060,060
Transportation—Water line		84						84
Miscellaneous operations	10,117,831	9,917,800	4,018,721	3,599,068	1,346,499	1,525,626	4,752,611	4,793,106
General	19,073,022	17,044,968	7,625,779	6,918,262	3,806,219	3,319,787	7,641,024	6,806,919
Railway operating expenses	516,856,143	541,490,418	213,474,672	220,155,874	95,066,043	95,165,378	208,315,428	226,169,166
Net revenue from railway operations	95,083,268	278,455,168	26,818,169	86,712,547	22,710,509	48,426,031	45,554,590	143,316,590
Railway tax accruals	44,773,078	161,551,876	15,319,918	41,900,560	11,628,716	30,595,421	17,824,444	89,055,895
Pay-roll taxes	20,386,210	19,614,057	8,291,771	8,063,011	3,800,842	3,362,505	8,293,597	8,188,541
Federal income taxes	3,174,017	111,596,766	*1,405,863	18,503,302	3,786,375	22,456,818	793,505	70,636,646
All other taxes	21,212,851	*30,341,053	8,434,010	15,334,247	4,041,499	4,776,098	8,737,342	10,230,708
Railway operating income	50,310,190	116,903,292	11,498,251	44,811,987	11,081,793	17,830,610	27,730,146	54,260,695
Equipment rents—Dr. balance	8,753,772	13,272,848	3,742,608	5,073,715	*170,689	*317,946	5,181,853	8,517,079
Joint facility rent—Dr. balance	3,476,113	3,683,065	1,753,952	1,716,945	479,619	471,087	1,242,542	1,495,033
Net railway operating income	38,080,305	99,947,379	6,001,691	38,021,327	10,772,863	17,677,469	21,305,751	44,248,583
Ratio of expenses to revenues (per cent)	84.5	66.0	88.8	71.7	80.7	66.3	82.1	61.2

FOR SIX MONTHS ENDED WITH JUNE, 1946 AND 1945

Item								
Miles of road operated at close of month	227,770	228,293	55,943	56,007	43,287	43,331	128,540	128,955
Revenues:								
Freight	$2,627,942,945	$3,548,203,567	$993,034,133	$1,319,808,204	$538,418,563	$683,888,698	$1,096,490,249	$1,544,506,665
Passenger	671,738,374	819,051,935	296,370,241	336,334,393	113,190,451	158,549,678	262,177,682	324,167,864
Mail	61,961,780	63,134,005	21,754,681	21,241,621	10,731,602	11,166,310	29,475,497	30,726,074
Express	44,577,455	82,214,633	3,421,843	24,251,673	7,376,581	12,303,285	33,779,031	45,659,675
All other operating revenues	171,087,108	184,718,518	79,472,457	81,387,115	23,085,532	25,820,903	68,529,119	77,510,500
Railway operating revenues	†3,577,307,662	†4,697,322,658	1,394,053,355	1,783,023,006	692,802,729	891,728,874	1,490,451,578	2,022,570,778
Expenses:								
Maintenance of way and structures	565,627,877	626,419,284	201,191,929	227,363,083	117,270,740	112,403,825	247,165,208	286,652,376
Depreciation	60,055,512	58,337,659	26,063,128	25,533,921	9,679,814	9,344,879	24,322,570	23,458,859
Retirements	3,256,684	4,015,361	752,694	797,511	545,837	663,572	1,958,153	2,554,278
Deferred maintenance	*2,388,505	*2,567,228	*549,520	*781,515	337,882		*2,176,867	*1,785,713
Amortization of defense projects	131,711	12,904,949	67,305	3,876,673	53,401	2,200,554	11,005	6,827,722
Equalization	12,494,385	16,056,937	6,684,279	7,407,498	3,037,656	4,829,917	2,772,450	3,819,522
All other	492,068,090	537,671,606	168,174,043	190,528,995	103,616,150	95,364,903	220,277,897	251,777,708
Maintenance of equipment	722,458,241	822,663,384	304,832,764	335,292,579	131,998,303	157,515,002	285,927,174	329,855,803
Depreciation	110,412,908	107,373,421	46,610,978	45,287,778	22,053,922	21,501,534	41,748,008	40,584,109
Retirements	*208,963	*97,488	*83,436	*16,436	*61,519	*50,808	*64,008	*30,244
Deferred maintenance and major repairs	*1,733,848	*906,194	*169,368	*10,711	*81,701		*1,482,779	*895,483
Amortization of defense projects	3,786,067	104,815,625	1,656,029	34,973,784	526,057	25,419,547	1,603,981	44,422,294
Equalization	1,554,291	606,551	*17,536	*14,785	1,397,056	475,227	174,771	146,109
All other	608,647,786	610,871,469	256,536,097	255,072,949	108,164,488	110,169,502	243,947,201	245,629,018
Traffic	81,670,561	70,654,841	29,700,116	25,310,048	15,347,938	13,364,582	36,622,507	31,980,211
Transportation—Rail line	1,537,558,275	1,513,743,636	670,068,841	675,044,644	269,186,308	256,927,203	598,303,126	581,771,789
Transportation—Water line		1,209						1,209
Miscellaneous operations	61,258,688	57,963,940	24,041,558	21,280,838	8,685,069	9,086,700	28,532,061	27,596,402
General	116,751,702	103,077,734	46,586,960	41,487,884	23,093,577	19,898,053	47,071,165	41,691,797
Railway operating expenses	3,085,325,344	3,194,524,028	1,276,122,168	1,325,779,076	565,581,935	569,195,365	1,243,621,241	1,299,549,587
Net revenue from railway operations	491,982,318	1,502,798,630	117,931,187	457,243,930	127,220,794	322,533,509	246,830,337	723,021,191
Railway tax accruals	267,592,845	861,719,866	88,196,288	209,752,705	68,653,509	204,450,382	110,743,048	447,516,779
Pay-roll taxes	125,065,602	115,888,854	51,833,551	48,489,229	22,721,640	20,110,343	50,510,411	47,289,282
Federal income taxes	12,637,925	593,165,703	*16,238,241	95,609,857	19,753,887	153,953,754	9,122,279	343,602,092
All other taxes	129,889,318	152,665,309	52,600,978	65,653,619	26,177,982	30,386,285	51,110,358	56,625,405
Railway operating income	224,389,473	641,078,764	29,734,899	247,491,225	58,567,285	118,083,127	136,087,289	275,504,412
Equipment rents—Dr. balance	52,090,045	71,891,368	23,073,286	36,185,283	*982,287	813,965	29,999,046	34,892,120
Joint facility rent—Dr. balance	19,342,816	20,661,011	9,924,398	10,202,273	2,433,918	2,311,910	6,984,500	8,146,828
Net railway operating income	152,956,612	548,526,385	*3,262,785	201,103,669	57,115,654	114,957,252	99,103,743	232,465,464
Ratio of expenses to revenues (per cent)	86.2	68.0	91.5	74.4	81.6	63.8	83.4	64.3

* Decrease, deficit, or other reverse item.

† Railway operating revenues are after deduction of $1,489,945 for the six months ended with June, 1946, and $20,853,279 for the six months ended with June, 1945, to create a reserve for land grant deductions in dispute.

Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

Current Publications

BOOKS

The Regulation of the Security Markets, by Willard E. Atkins, George W. Edwards and Harold G. Moulton, 126 pages. Published by the Brookings Institution, 722 Jackson Place, Washington 6, D. C. Price, $2.

This study seeks to clarify the basic issues involved in the regulation of the security markets. It analyzes the forces and conditions responsible for federal regulation, summarizes the major purposes and provisions of the eight acts pertaining to the security business which have been passed since 1933, and then concentrates on the practical issues arising out of the administration of these laws.

Fifty-Eighth Annual Report on the Statistics of Railways in the United States for the Year Ended December 31, 1944, 578 pages. Prepared by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission, Washington, D. C. Available from the U. S. Government Printing Office. Washington 25, D. C. Price, $2.25.

This publication contains the usual complete collection of statistics on railways. It includes statistics on roadway and track. equipment, traffic, operation, employees. fuel, accidents, revenues, expenses and taxes, income and earned surplus, dividends and interest, balance sheet, investment in road and equipment, capitalization, and receiverships and trusteeships. Statistics are given for individual carriers. those covering the Class I roads being more extensive than those for the other groups of carriers. Some statistics are also included for the Pullman Company. express companies. electric railways, carriers by water, oil pipe lines, motor carriers, freight forwarders and private car owners.

A Chronological History of Electrical Development From 600 B.C. 106 pages. Published by the National Electrical Manufacturers Association, 155 E. 44th St., New York 17, N. Y. Price, $2.00.

As the title indicates, this book contains a chronological list of developments in the electrical industry, beginning with the year 600 B.C., and continuing through the year 1944. An appendix contains a list of the member companies of the association and provides historical data regarding each of them.

TRADE PUBLICATIONS

The Armed Forces of A. C. F. 93 pages. Illustrated with photographs. Published by the American Car & Foundry Co., 30 Church street, New York 7. Free. (Number of copies available for distribution is limited).

This is not merely the war story of a single company, Charles J. Hardy, chairman of American Car & Foundry, says in the foreward. "In its larger aspects," he continues, "it is a record intended to reveal to posterity what American industry, as exemplified by one of many companies, can accomplish under a democratic form of government in an urgent hour of national need."

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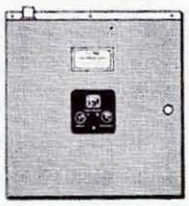

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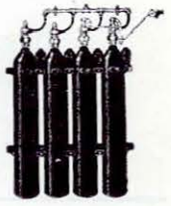

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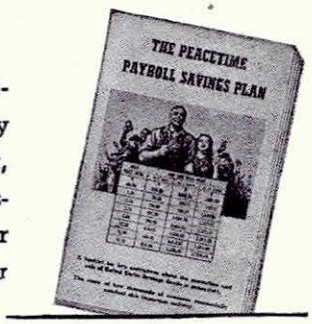

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The Treasury Department acknowledges with appreciation the publication of this message by

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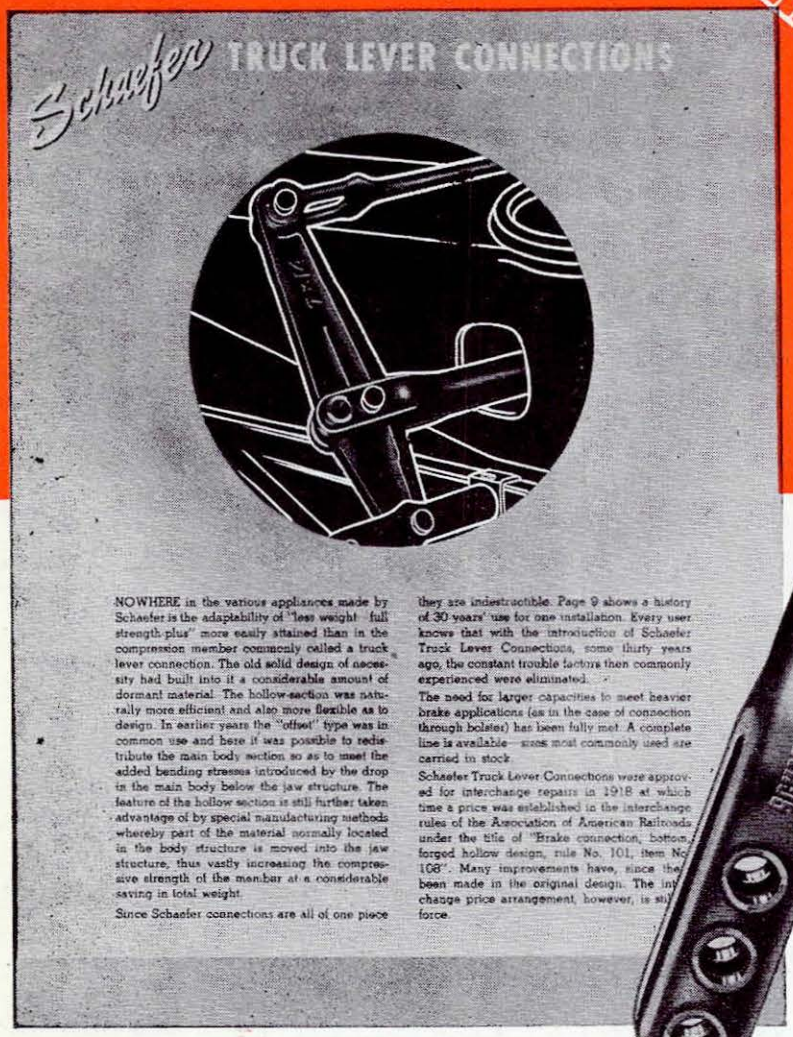
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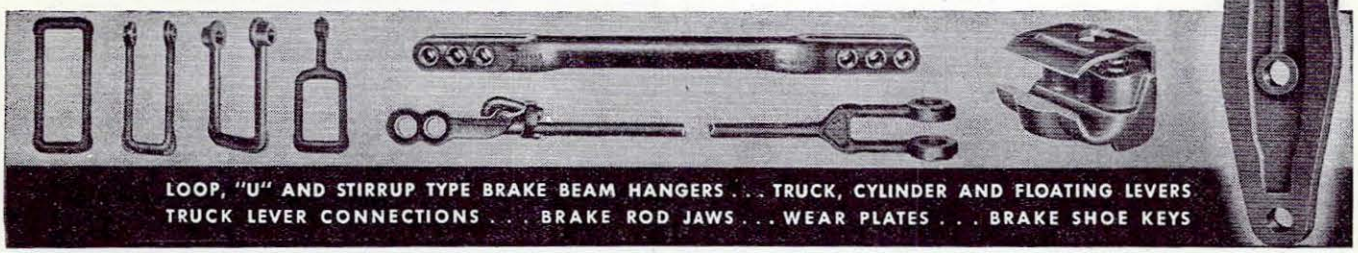

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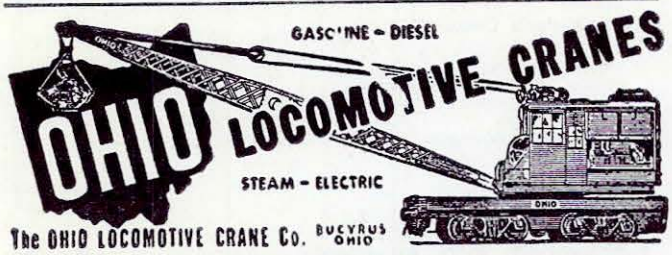

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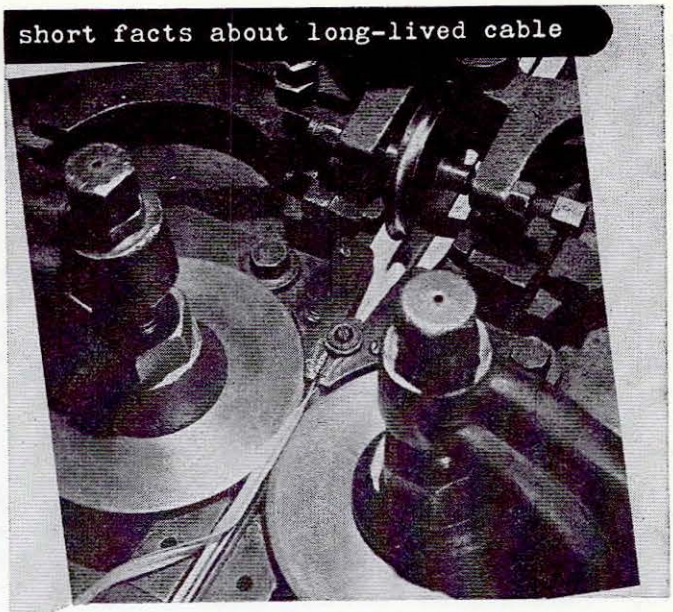

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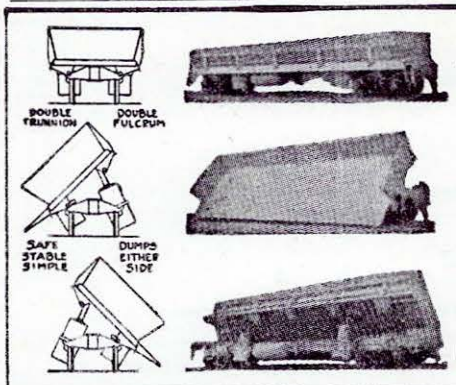

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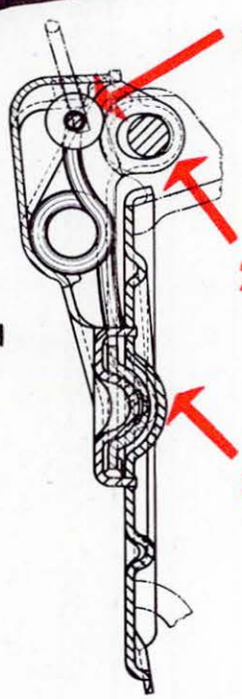

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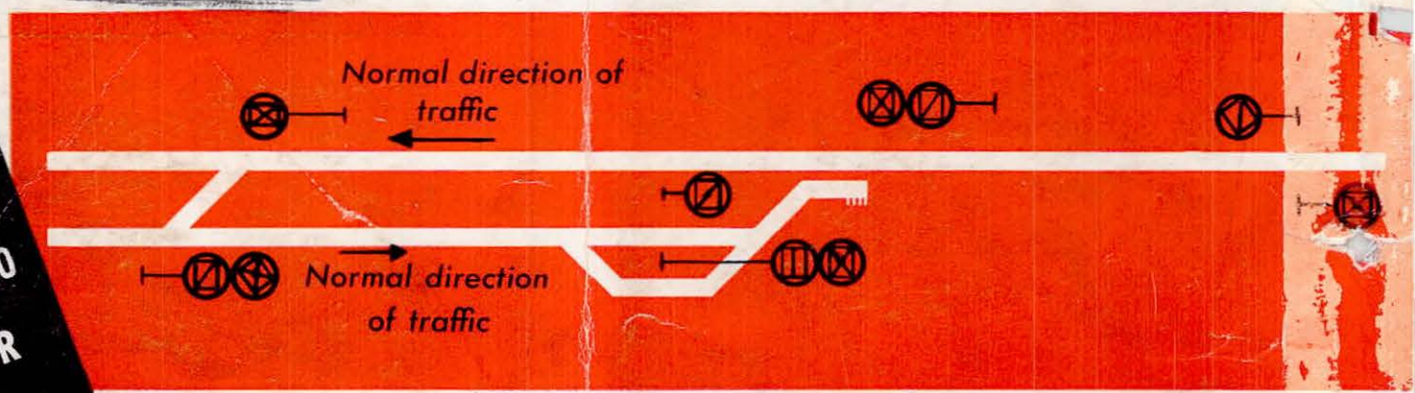

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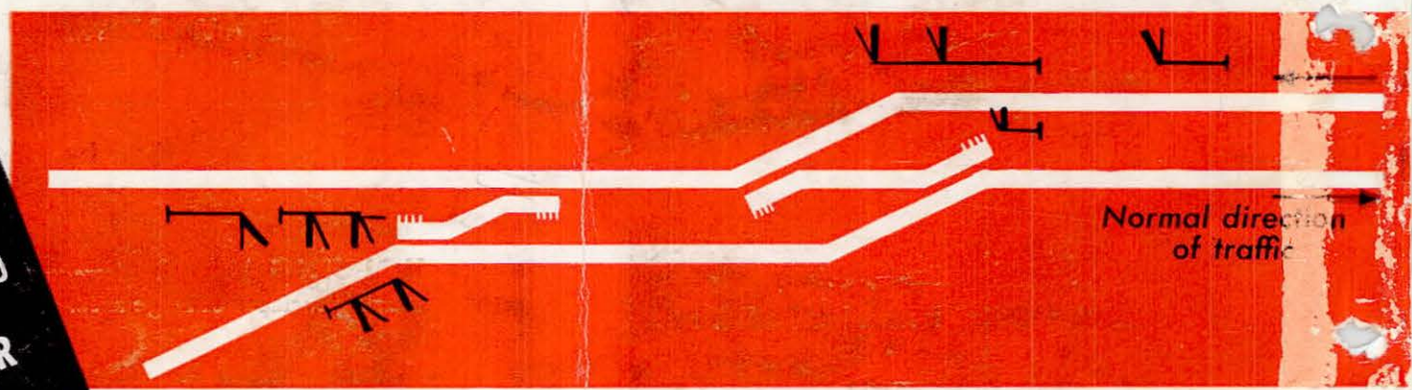

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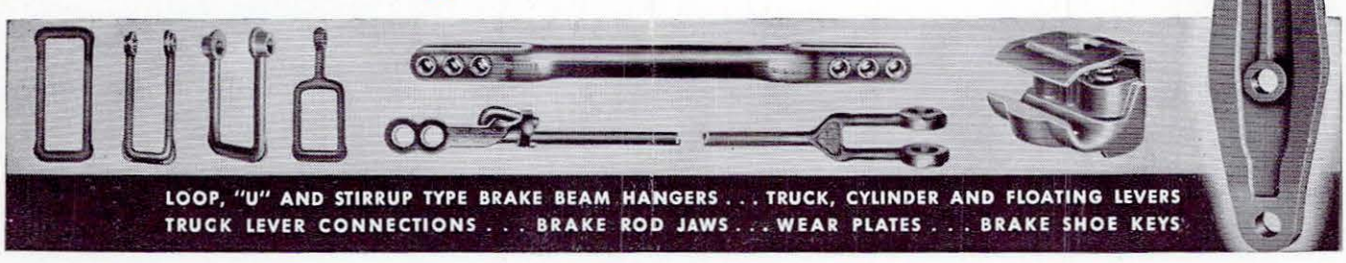

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TRUCK LEVER CONNECTIONS . . . BRAKE ROD JAWS . . . WEAR PLATES . . . BRAKE SHOE KEYS

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Shown here is one of five new Timken Bearing Equipped high-speed freight cars on the Milwaukee Road built for operation in passenger trains which are also Timken Equipped.

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Timken Bearing freight car application.

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AUGUST 31, 1946

Railway Age

Founded in 1856

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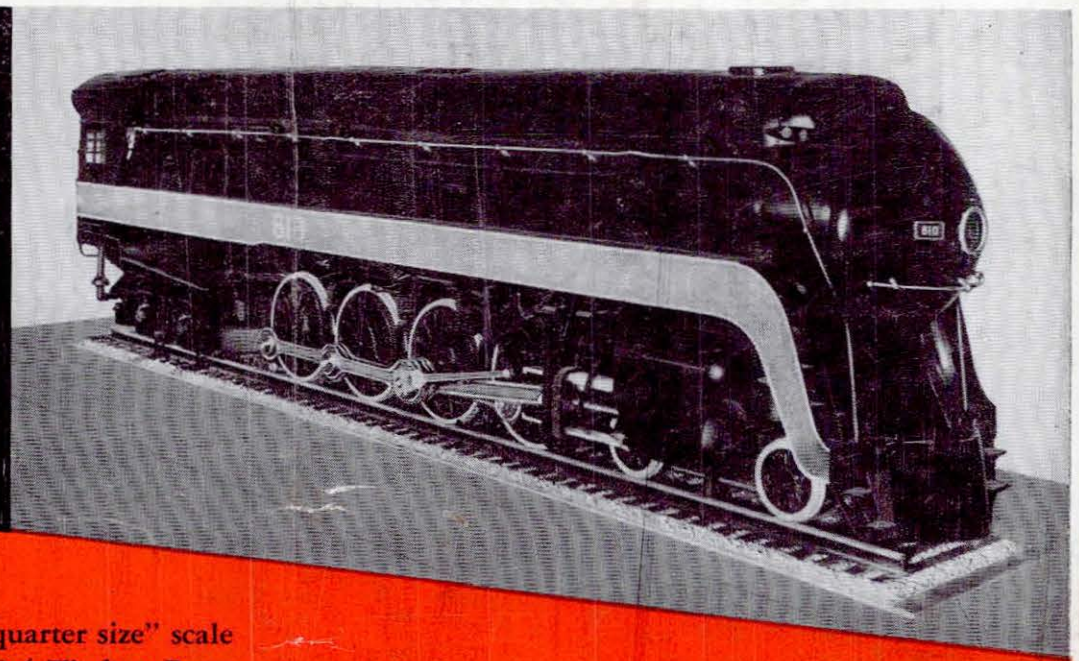

This unique "quarter size" scale model of a modern type 4-8-4 Timken Bearing Equipped steam locomotive will be exhibited at the Allied Railway Supply Association Show, Sherman Hotel, Chicago, September 4, 5 and 6 . . . Spaces No. 160 to 165 and 176 to 181 inclusive, mezzanine floor (opposite assembly room entrance).

It works! Wheels, pistons, main and side rods operate just like the real thing, while the boiler rises periodically to show all the working parts inside the frame. Length of model overall, 16 feet. Nothing like it ever has been made before. Do not miss it.

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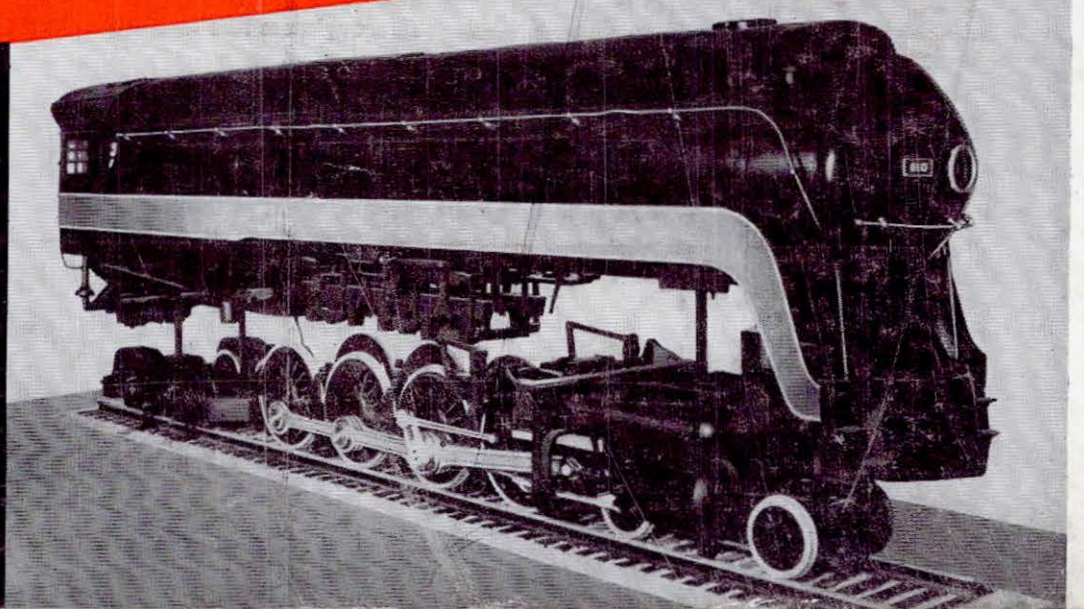

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A day with an *AMCCW* inspector *shows why...*

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Published weekly by Simmons-Boardman Publishing Corporation, 1309 Noble Street, Philadelphia, Pa. Entered as second class matter, January 4, 1933, at the Post Office at Philadelphia, Pa., under the act of March 3, 1879. Subscription price $6.00 for one year U. S. and Canada. Single copies, 25 cents each. Vol. 121, No. 9.

Straight Talk On Replacement Parts

For your protection and ours, make it a rule to insist on Bethlehem replacement parts for equipment designed and currently manufactured by Bethlehem.

Parts for Bethlehem-designed track products are made to exacting specifications and machined to close tolerances in accurate jigs. They are carefully inspected by experienced supervisors who know what is required of each component. Any part that does not meet these high specifications is immediately rejected by our own shops and laboratories.

When you use Bethlehem equipment, we strongly recommend that the following three "Don'ts" be given particular attention:

DON'T use replacement parts of unknown origin, simply because they happen to fit.

DON'T use parts taken from, or intended for, non-Bethlehem products. This is no attempt to disparage the products of other manufacturers. But Bethlehem parts are made specifically for Bethlehem devices, and no substitutes can be expected to do the job as well.

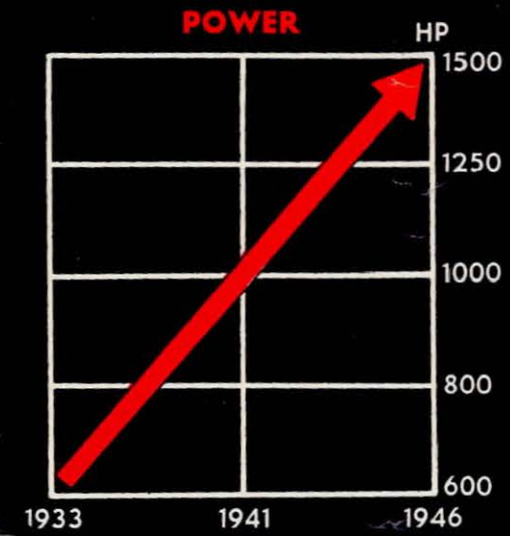
DON'T use "home-made" replacement parts when parts are obtainable from the manufacturer. It is difficult for any shop to estimate, and duplicate, the precise properties of the original items.

★ BETHLEHEM STEEL ★

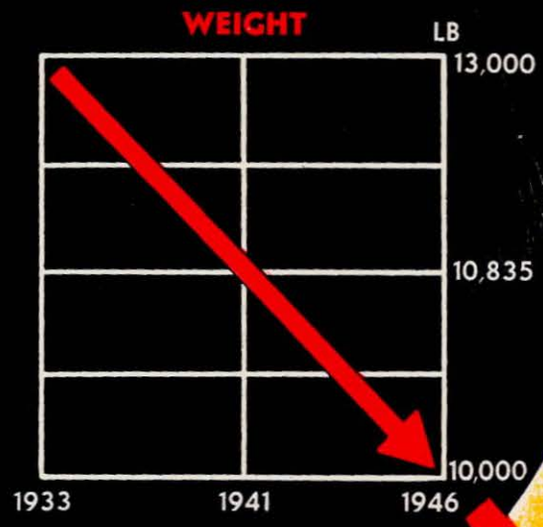
Remember...

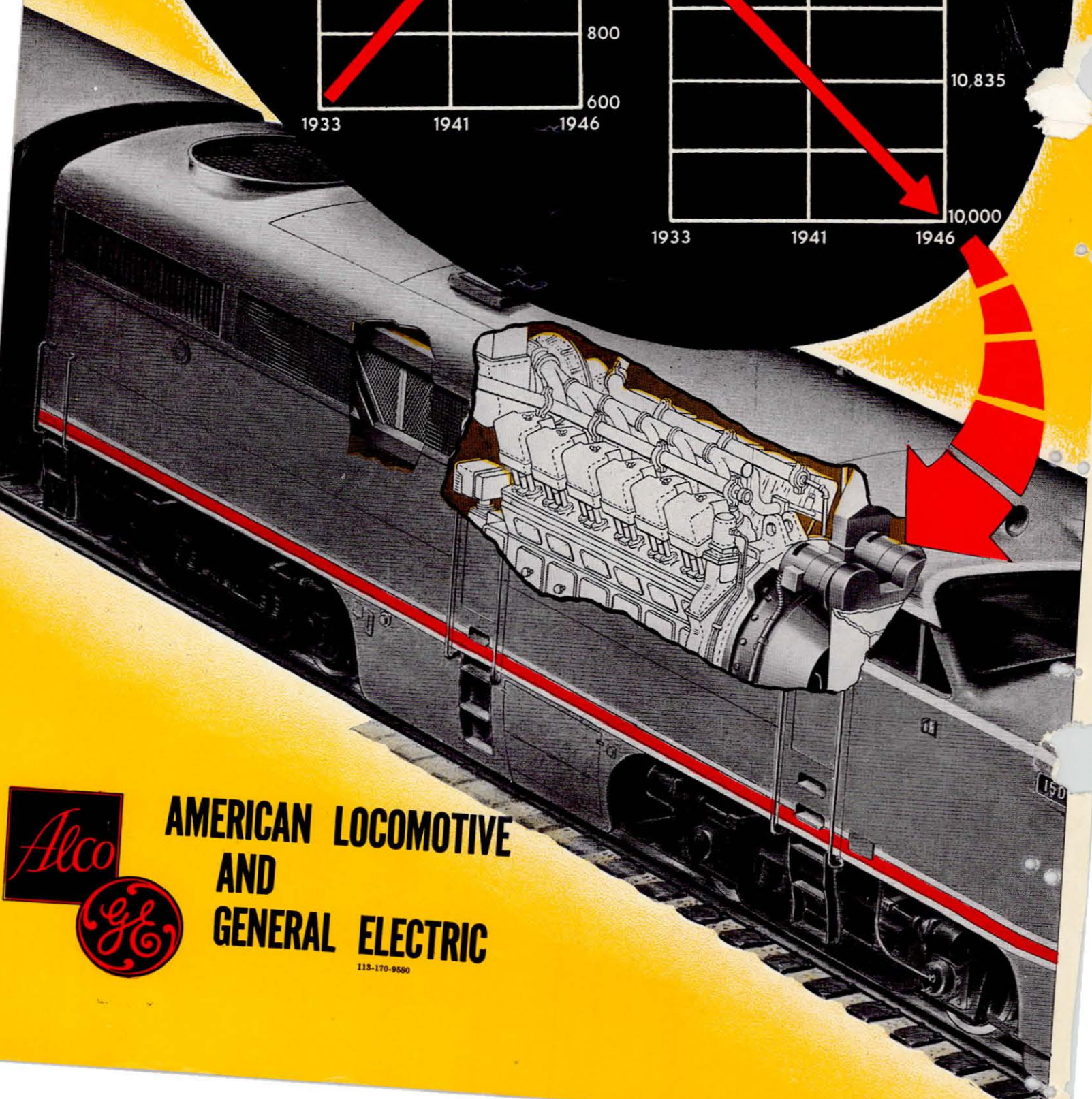
USE ONLY BETHLEHEM PARTS FOR BETHLEHEM TRACK EQUIPMENT

AS POWER GOES UP . . .
WEIGHT COMES DOWN



Generator design has greatly improved in the past 13 years—since 1933, output has increased 250 per cent; weight has decreased 23 per cent.





Alco GE

AMERICAN LOCOMOTIVE AND GENERAL ELECTRIC

113-170-9580

YOU GET MORE

Working HORSEPOWER

WITH THE NEW ALCO-G.E. DIESEL-ELECTRIC . . .

. . . Because the generator, traction motors, and control are specially designed for prompt response and accurate control.

As a result, maximum utilization of the diesel engine power is realized. You get more *working* horsepower—and more work per locomotive unit—with the "1500".

The new generator is built specifically to operate at maximum efficiency with the new Alco diesel engine. It is rated 1500-hp at 1000 rpm—the first time a generator for locomotive service has been rated at this speed and capacity. Weighing only 10,000 pounds, this generator develops 31 per cent more power per pound of weight than the last previous model.

To further increase generator performance, an improved ventilating system has been developed. The single-bearing generator is mounted directly to the engine by means of a one-piece adapter in which is incorporated collection chambers which direct exhaust air from the generator out of the engine room. The resulting lower engine-room temperature makes possible lower temperatures in the windings, greater loading capacity, and longer life of the electric equipment.

This new high-speed generator is only one of the many new features of the "1500". The new 12-cylinder diesel engine, the constant-pressure turbosupercharger, the power plant load regulating system, the engine cooling system—all combine to make a locomotive that will give you more *working* horsepower—that will haul more tons over greater distances in less time and at less cost. This locomotive is *really built to increase railroad earning power.*

THE NEW ALCO-G.E. "1500"

Built TO INCREASE RAILROAD EARNING POWER